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ABSTRACT

Intended for researchers, policy analysts, and practitioners, the book provides a review of 176 documents (both published and unpublished) focusing on education, employment, and independent living outcomes across ten handicapping conditions. The first chapter provides an introduction to the project to review the extant literature on the subject. The next chapter describes the conceptual framework used to organize the literature and outlines procedures used to locate relevant literature. Chapter 3 describes the database system used and the development of the review work sheet. Chapter 4 summarizes results concerning educational outcomes in a review of concepts of educational outcomes, a sample description, a synthesis of the literature on educational outcomes, and suggestions for future research. Employment outcomes are considered next with a discussion of categories of outcomes, a sample, a literature synthesis, and suggestions for research.

Independent living is reviewed in a similar fashion in the following chapter. The final chapter provides a summary of all three areas across the handicapping conditions. The major portion of the document consists of the annotated bibliography of reviewed articles listed alphabetically by author. In addition to bibliographic information, each citation includes data on handicapping condition and severity, the article's primary focus, and an abstract. (DB)

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Transition Literature Review: Educational, Employment, and Independent Living Outcomes

Volume 2

Delwyn L. Harnisch Adrian T. Fisher Peter A. Kacmarek Lizanne DeStefano

with assistance from Jho-Ju Tu Sigrid K. Danielson

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The following principles guide our research related to the education and employment of youth and adults with specialized education, training, employment, and adjustment needs.

- Individuals have a basic right to be educated and to work in the environment that least restricts their right to learn and interact with other students and persons who are not handicapped.
- Individuals with varied abilities, social backgrounds, aptitudes, and learning styles must have equal access and opportunity to engage in education and work, and life-long learning.
- Educational experiences must be planned, delivered, and evaluated based upon the unique abilities, social backgrounds, and learning styles of the individual.
- Agencies, organizations, and individuals from a broad array of disciplines and professional fields must effectively and systematically coordinate their efforts to meet individual education and employment needs.

- Individuals grow and mature throughout their lives requiring varying levels and types of educational and employment support.
- The capability of an individual to obtain and nold meaningful and productive employment is important to the individual's quality of life.
- Parents, advocates, and friends form a vitally important social network that is an instrumental aspect of education, transition to employment, and continuing employment.

The Secondary Transition Intervention Effectiveness Institute is funded through the Office of Special Education Programs, Office of Special Education and Rehabilitative Services, U.S. Department of Education (contract number 300-85-0160).

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Preface

Transition Literature Review: Educational, Employment, and Independent Living Outcomes, Vol. 2, is intended for researchers, policy analysts, and practitioners. It provides a review of documents that focus on education, employment, and independent living outcomes across ten handicapping conditions, including those of students considered to be educationally at risk. Both published and unpublished literature materials have been included in our examination for review. Systematic information was gathered from each of the selected documents, and a data base system was developed to process all of our review notes. Volume 2 presents a comprehensive review of the 86 articles from Volume 1, plus an additional 90 articles reviewed this year. Future volumes of this annual review will update this data base system and will provide an ongoing annotated bibliography.

The classification system developed for the documents allows the reader to examine any one of the 30 cells described in our literature review. These cells are created from the 10 rows representing the handicapping conditions (learning disabilities; speech impairments; mild moderate and severe/profound mental retardation; serious emotional disturbance; hearing impairments; orthopedic handicaps; other health impairments; visual impairments; multiple handicaps;



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deaf-blindness; and educationally at risk) and by the three outcome areas of education, employment, and independent living represented across the columns. This framework allows for specific identification of articles that have a primary focus on any one of the three outcome areas or on any one of the handicapping conditions; thus the reader has access to a wealth of information within any of these 30 possible cells.

One of our objectives has been to produce a literature review based upon a conceptual framework that would provide a clear understanding of the classification of articles focusing on transition activities. To help readers locate articles we have made several improvements in indexing since Volume 1. Thanks to readers' and reviewers' suggestions, our annotated bibliography is now arranged alphabetically by the first author's last name instead of by outcome area. We have also added outcome area listings in Appendixes B, C, and D. With these enhancements, readers can now locate a document's record by means of the author's last name or its outcome Each document record contains a listing of the area. particular handicapping conditions represented the research articles.

We hope that this volume will be clear and helpful for those who are involved with transition programs and that it will be appealing and informative to the interested reader.



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We have worked to provide a synthesis of the transition literature based on two years of review of selected documents. Various tables have been prepared to assist the reader in gaining a broader understanding of the articles that are presently part of our data base.

A major thrust of this year's task has been to expand the reviewed literature on independent living. Fourteen new independent living articles have been added. In order to help the reader to achieve a better understanding of the numerous possible findings in this domain, the chapter on independent living uses last year's definition of independent living as a basis for reviewing the expanded data base. An effort was also made to achieve a more even distribution of articles across all three outcomes areas and 10 handicapping conditions. However, we do consider our data base to be representative of the currently available literature.

This report also utilizes the important advances in electronic data base management. Data base files are created so that any operator of the system can create a report of selected references or abstracts. Those most familiar with data base systems will appreciate the manner in which this system can assist them with their general literature searches and also with searches focusing on specific handicapping conditions. The possibilities are practically endless and

provide the basis for quick recall for the policy analyst, and at the same time provide the practitioner with the capability to scan the system for articles that focus on employment, educational, or independent living outcomes for a particular handicapping condition.

It is our plan to continue updating this review with additional entries to the data base through continued literature searches and networking. As new studies across handicapping conditions are completed at the local, state, and national levels, we expect to provide comprehensive additional analyses of the transition process from high school to post-secondary experiences. Overall, the continued expansion of this data base will be a valuable resource in the examination of transition issues for handicapped youth.

DLH ATF PAK LDS

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thank the individuals serving in these agencies for sharing their thoughts and feelings on transition.

We are also very grateful for the expert assistance of our colleaguer from the College of Education, and Dale Snauwaert and Debbie Thompson for their reviews of articles. The staff from the Transition Institute have been uniformly helpful, and we thank them with great pleasure for their dedication to our effort in the production of this transition literature data base review system.

Additional thanks must go to Cleta Conerty, of the Institute for Research on Human Development, for the time and effort that she spent in editing and word processing the final document.



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Introduction

In 1985, the College of Education at the University of Illinois at Urbana-Champaign (UIUC) received a Federal contract for the creation of an institute to study and evaluate services delivered to disabled youth who are entering the job market.

The Transition Institute at Illinois, which is funded for five years by the Office of Special Education and Rehabilitative Services (OSERS), U.S. Department of Education, conducts research and consults with federally funded secondary special education projects throughout the country. The Transition Institute is directed by Frank R. Rusch, Professor of Special Education.

The Transition Institute is designed to address both the theoretical and practical problems of transition from school to work for youth with handicaps. The Institute has grown out of a consensus among legislative, professional, and advocacy organizations that an initiative has been needed to establish a more systematic and effective delivery system to assist youth with handicaps in making the transition from school or unemployment to work. The passage of Public Law



2 Introduction

98-199 provided the authority to address this need specifically through Section 626, entitled "Secondary Education and Transition Services for Handicapped Youth." The mission of the Transition Institute is threefold: to address a series of interrelated applied research, program evaluation, and evaluation technical assistance needs related to secondary special education and transitional services.

Review of Extant Literature

One of the major tasks of the evaluation research program of the Transition Institute is to examine the educational, employment, and independent living outcomes attained by handicapped youth as they exit school and enter the work force. Federal, state, and local data sources as well as follow-up studies have been compiled and reviewed.

A data base system has been developed for the collection, storage, and display of information from the documents pertinent to each of the outcome measures as a function of the student's handicapping condition. A conceptual model has been created for processing the documents and summarizing the research findings in the literature concerning the outcome measures of education, employment, and independent living status. Information is also being added to our system from our contacts with related organizations throughout the United



Introduction 3

States, such as regional offices of the Rehabilitation Services Administration.

addition to the <u>Transition</u> <u>Literature Review on</u> Educational, Employment, and Independent Living Outcomes, a document modeled after the <u>Digest of Data on Persons with</u> Disabilities and The Condition of Equation is published annually (beginning in 1986) by the Transition Institute at Illinois. The <u>Digest on Youth in Transition describes</u> recently catalogued information on such variables as the incidence of handicapping conditions, employment unemployment rates for both handicapped and nonhandicapped youth, minority status among handicapped youth, secondary school completion data, employment status, earnings, and residential arrangements. The Seventh Annual Report to Congress and the High School and Beyond study were examined in the first edition. The Eighth Annual Report to Congress and additional analyses of the High School and Beyond data are featured in this second volume.



Conceptual Framework

The search for documents focused on three general areas: education, employment, and independent living outcomes, and ten handicapping conditions, including those of students considered to be educationally at risk. The handicapping conditions were selected according to P.L. 94-142 guidelines. (See Appendix A for definitions and Table 1 for categories.)

One goal in 1987 was to attain a more balanced representation of reviewed literature in all three outcome areas. Another goal was to identify and review more articles related to independent living outcomes. In accordance with our goals, primary interest was given to empirically based articles. However, articles that were discussions of significant theoretical topics or studies that examined interesting research questions but used subjects that were outside the limits of the specified age range (ages 16-24, ± 2 years) were included in the reviewed literature.

The transition from youth to adulthood for handicapped individuals has become an increasingly important topic for researchers, policy analysts, and practitioners. This study of outcomes should ultimately contribute to a greater



understanding of the development of young adults and of the factors that determine individual education, career, and independent living outcomes. Such information is useful as a basis for review and reformulation of federal, state, and local policies affecting the transition of youth from school to adult life.

The Institute staff defined educational outcomes along such variables as achievement of education-related program goals; diploma/degree achieved; attendance; achievement of IEP goals; behavioral performance; achievement test scores; evaluation of progress by teachers, parents, and aides; status of non-completers; career education; program composition; and school-business collaborations. Employment outcomes were defined in terms of employment status, job profiles, earnings, fringe benefits, stability of employment, job satisfaction, retention rates, work history, number of hours employed, methods of job attainment, employer attitudes, sheltered workshops, supported employment, and competitive employment. Self-advocacy and skills, living arrangements, education and training, mobility and transportation, use of generic services and facilities, recreation and leisure, community interaction, satisfaction with services, financial situation, and quality of life numbered among the variables that defined independent living outcomes.

Procedures Used to Locate Relevant Literature

An attempt was made to identify published and unpublished studies, journal articles, manuscripts, books, master's theses, and doctoral dissertations containing information on each of the selected outcomes under examination. Documents were selected for review on the basis of the following criteria: a) data on at least one of the outcomes must be included in the article; b) the study must deal with one or more of the ten identified handicapping conditions (plus disadvantaged); c) the study must have been published since the passage of the Education for All Handicapped Children Act of 1975 (P. L. 94-142); and d) the age range of the samples should be 16 to 24 (± 2) years. The age range of the samples has been amended to include some appropriate studies that included adults older than 26 years.

With these criteria and the definitions of the three outcome areas as guidelines, we reviewed secondary sources such as bibliographies, conference proceedings notebooks, reference lists, computer searches, and a manual of ongoing research programs to locate appropriate documents. The primary resource for identifying review material was the Transition Institute Library, which provided updated library bibliographies, convenient location, and ease of access to a wide array of transition materials. ERIC (Education Resources Information Center) computer searches were



performed in the Transition Institute library. thesaurus was used to translate the identified factors of the three outcomes into the topic descriptors necessary to search the ERIC system. ERIC, operated by the National Institute of Education, indexes and abstracts the published literature in education, as well as the fugitive literature. An ERIC search from the University of Illinois Library generated a listing of approximately 1,000 abstracts. Approximately 100 of these documents met the initial requirements for inclusion in this volume.

The referenced articles were located and read by four reviewers in 1986 and five reviewers in 1987 who used a review work sheet designed to code information about the The information from the review work sheets was documents. entered into a computer using the dBASE III Computerized summaries of the data were collected and descriptively analyzed (see Chapter 3).

Approximately 25 documents were excluded from the data base in 1986 and about 11 documents in 1987 because: a) the subjects were younger than 14 years, and b) the studies involved programmatic descriptions of how to attain certain outcomes rather than descriptions of actual outcomes The latter was especially true of the studies on achieved. independent living outcomes.



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Several articles were added which did not meet the inclusion guidelines, among them reactions to a follow-up study in Vermont, surveys of special program composition in California, statistical reports, studies of client satisfaction with independent living centers, and others that added to the understanding of the three outcomes as they relate to handicapped youth.

The descriptive analyses of the outcome areas in Chapters 4-6 are based on 176 articles selected for review and entry into the data base. Table 1 gives the number of articles in each category of handicapping condition and outcome area; it represents the results of both the Institute and the University of Illinois ERIC searches, selected documents from various bibliographies, and the papers received from various researchers currently involved in follow-up and outcome studies. Concurrent with the literature search we have attempted to contact personnel of related specialist organizations, universities, and national agencies for information about works in progress.

Over the next 2 years, the Institute's activities in this area will continue to expand the data base through continued literature searches and networking. Comprehensive analysis and description of the status of graduates will emerge as more local, statewide, and national studies are initiated



TABLE 1. Summary of the Number of Articles Catalogued by Handicapping Condition and Outcome Area

HANDICAPPING CONDITION	EDUCATIONAL OUTCOME	EMPLOYMENT OUTCOME	INDEPENDENTLIVING	
Learning Disabilities	12	13	0	
Speech Impairment	5	5	0	
Mental Retardation: mild	2	22	5	
moderate	0	18	5	
severe/profound	0	, 15	3	
Serious Emotional Disturbance	3	15	3	
Hearing Impairment and Deafness	5	10	1	
Orthopedic Handicaps	3	16	0	
Other Health Impairment	t 1	10	2	
Visual Handicaps	3	7	2	
Multiple Handicaps	1	10	2	
Deaf-blindness	1	4	1	
Educationally at Risk	2	4	0	
TOTAL*	38	149	24	

^{*}Does not add to 176 as some articles included more than one handicapping condition.

across these handicapping conditions. The continued and future expansion of the Institute's data base will provide a resource from which to study issues concerning the desired outcomes for youth with handicaps.



Data Base System: Transition Literature

Once a process for selecting and locating relevant literature had been created, it was necessary to develop a system for reviewing the literature, and to choose a data base software package tailored to the project's needs. The necessity to maintain consistency and accuracy across the team of reviewers, as well as to devise an efficient method to review documents were the critical factors that influenced the design of the review work sheet. Ease of use, combined with powerful capabilities for adapting to a specific task, interfacing with other systems, and generating reports were the fundamental elements directing a software choice.

Development of a Literature Review Work Sheet

The review work sheet provided a method for selecting key concepts from each article for entry into a computer data base file. The review team developed a standard form, tested its use, and made necessary revisions. The format included a variety of components important to transition and specific to the task of examining outcomes for handicapped youth. The information was organized into eight categories: 1) article identification (using APA reference style), 2) primary focus (education, employment, or independent living), 3) handicapping conditions, 4) level and location of the study,



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5) outcome areas, 6) the sample size and description, 7) the instrumentation used in the study, 8) key words or descriptors, and 9) the abstract.

The article identification contained a record number, the media type, a complete reference in APA style, and the date of entry into the data base system. This information provided quick access to each article through any one, or a combination of, the components of bibliographic information.

The listing of 10 handicapping conditions was selected according to P.L. 94-142 guidelines; in addition, we included those considered to be educationally at risk. Reviewers circled T (True) or F (False) on the work sheet to indicate which handicapping conditions were discussed in the article. Reviewers further indicated whether the study had been conducted at a local, state, or national level, included the state abbreviation where appropriate, and indicated if the study was performed in more than one state, if it was theoretical in nature, or if it was a review of numerous studies.

The focus and substantive study area of the article was identified in accordance with three outcome variables: employment, education, and independent living. Each article was assigned a primary focus from one of these outcomes, but



many of the articles dealt with information and findings covering all of the outcome variables. A short descriptive memo was drafted to provide a guide and easy access to significant characteristics and findings from each study. The description of the sample and the instrumentation used in each study provided valuable information in examining the population studied and the methodology used. During 1986, 12 key words that defined the task were identified by the research team and reference librarians. Ten new keywords were added in 1987.

An abstract was prepared to summarize the salient elements of each article. As the process of reviewing the literature progressed, this intermediate step was evaluated and refined to better meet the needs of both the research team and the long-term goals of the Institute. As this project continues, the review process will be applied to all relevant articles. Systematic review and entry procedures will continue in order to update and expand this publication over the next three years.

Choosing a Data Base System

In choosing a software system for the storage of this information, many factors were considered. Versatility in adapting to task needs, ease in learning, simplicity of use, manipulation of data capabilities, and ability to interface

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with other systems were of utmost importance. It was these primary factors that drew the evaluation team to the dBASE III system. Produced by Ashton-Tate, dBASE III is a revised version of dBASE II. The advantages of dBASE III over its predecessor include the ability to use several data bases at once, a larger storage capacity, and increased speed, as well as new commands that facilitate its use. Currently the dBASE family is the unquestioned market leader in microcomputer data base management software (Hart, 1986).

The Variable Structure

Once the system was selected, a programmer worked closely with the review team to develop a variable structure for dBASE III that matched the information to be entered from the review work sheets. Five different fields are available for inputing information. As seen in Table 2, those fields (date, numeric, character, logical, and memo) matched the type of information in each variable of the review work sheet. For example, the logical field permitted only one of two possible letters to be entered and was used for the T or F indicators for handicapping conditions. The memo field allowed the reviewers to store large sections of text in a separate file linked to a main data file, which enabled reviewers to define each outcome area according to the individual study, a capability that would not have existed it the system only provided access to key words.



TABLE 2. Variable Structur for Data Base

St	ruct	ure for data	base : C:	base.dbf	
Nu	mber	of data rec	ords :	176	
Da	te o	f last updat	e : 0	7/10/87	
Fi	eld	Field name	Туре	Width	Dec
	1	ACHE_PRI	Numeric	1	500
	2	IN \overline{DATE}	Date	8	
	3	MDN TYPE	Numeric	2	
	4	AUTHOR	Character	100	
	5	PUB_YEAR	Numeric	4	
	6	HTMCM_BUG	Character	10	
	7	TITLE	Character	250	
	8	JR AG PB	Character	250	
	9	PLACE PB	Character	50	
	10	PAGE NO	Character	50	
	11	LD _	Logical	1	
	12	SI	Logical	ī	
	13	MR MI	Logical	ī	
	14	MR MO	Logical	ī	
	15	MR SP	Logical	ī	
	16	SED	Logical	ī	
	17	DEAF	Logical	ī	
	18	ORTHO	Logical	ī	
	19	HI	Logical	ī	
	20	VISU	Logical	ī	
	21	MULTI	Logical	ī	
	22	BLIND	Logical	ī	
	23	DIS	Logical	ī	
	24	LEVEL	Character	8	
	25	ACHE ED	Logical	ī	
	26	ED MEMO	Character	250	
	27	ACHE EMPLY	Logical	1	
	28	EMLPY MEMO	Character	250	
	29	ACHE INDP	Logical	1	
	30	INDP MEMO	Character	250	
	31	S SIZE	Numeric	10	
	32	SIZE MEMO	Character	250	
	33	ASSES SUR	Character	250	
	34	KEYWORDS	Character	250	
	35	ABSTRACT	Memo	10	
**				2270	
_					

Figure 1 provides a view of the screen that would appear as data are being entered from the review work sheet. The fields shown here were specific to our task, but the



```
Figure 1.
           Sample Entry Session: Screen View
Record No.
            86
ACHE PRI
            3
IN DATE
            06/24/86
MDN TYPE
            Sutter, P., Mayeda, T., Yanagi, G., & Yee, S.
AUTHOR
PUB YEAR
            1980
PUB MONTH
TITLE
             Comparisons of successful and unsuccessful
             community placed-mentally retarded persons.
            American Journal of Mental Deficiency, 85(3),
JR AG PB
PLACE PUB
PAGE NO
            262-270.
LD
SI
            F
MR MI
            T
MR MO
            Т
MR_SP
            T
            F
SED
DEAF
            F
ORTHO
            F
HI
            F
VISU
            F
MULTI
            F
BLIND
            F
DIS
            F
LEVEL
            ST (HI)
ACHE ED
ED MEMO
ACHE EMPLY
            F
EMPLY MEMO
```

seemingly infinite adaptability to various information needs is just one of the characteristics that makes dBASE III a powerful tool for a data organization task.



Another example of the powerful capabilities of dBASE III includes the ability to generate a wide variety of reports from the data. The majority of tables included throughout this document, the annotated bibliography, and outcome area indexes are all examples of the combinations of data that can be pulled from the files. Output reports can be generated on paper as well as to disk files. Data can be exported in standard formats to Statistical Analysis Systems (SAS) on PC's and mainframes. Data can also be used by a word processing program through the use of an ASCII (American Standard Code for Information Interchange) file.

The program was also modified in 1987 to include three new levels of study indicators—(RS) research synthesis, (MA) meta-analysis, and (MS) multi-state, a study that included samples from more than one state.

<u>Future Uses</u>

The data base activities of the first two years have just begun to tap the potential uses of dBASE III. The system will be able to supply customized reports that meet specific needs of practitioners, policy analysts, and researchers interested in transition. A simple example of the manner in which the report generation features may be utilized could be that of a program director in a rural setting who might specify the location, the handicapping condition(s), and an



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Data Base System outcome area in which he/she wished to review current literature. This system could generate such reports with ease.

The tremendous range of powerful and convenient support programs currently available has not yet been examined. These support programs can expand and enhance the capabilities of dBASE III to make it an even stronger system. The future use of the system presents exciting possibilities in which we will be limited only by our abilities to request information creatively.



Educational Outcomes

The school years are among the most important years of a person's life, especially in the case of an individual with handicaps. In 1975, P.L. 94-142 focused national attention on the academic achievement and the quality of educational services available to handicapped persons. This chapter reviews studies of the educational outcomes of handicapped youths; it includes a summary of articles reviewed in the 1986 edition and reviews 33 additional articles.

Concepts of Educational Outcomes

In 1986, Harnisch, Chaplin, Fisher, and Tu reviewed 23 articles on educational outcomes and identified five major concepts in the literature: academic training, vocational training, student rating of the school, activities outside the classroom, and issues of behavior. In 1987 the concept areas have been revised to provide a more comprehensive and efficient system for categorizing educational outcomes. These new areas include: academic training, affective outcomes in the school, vocational education, school-business collaboration, program composition, outside the school, student rating of the school, postschool adjustment, post-secondary education, career education, and educational-transitional programming.



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Academic training has remained intact. This area includes information about grades and coursework completed, test scores and achievement in academic subjects (mathematics, reading comprehension, language arts, civics, and science), IQ test scores, Stanford Achievement test scores, SAT test scores, and the impacts of mainstreaming.

The category of issues of behavior was revised and renamed affective outcomes in the school. This category concerns students' levels of motivation and self-concept, juvenile delinquency, drop-out status, social adjustment, behavior, classroom discipline, and encounters with the law.

The category of <u>vocational training</u> includes the outcomes of various vocational programs within the school environment. The effectiveness of vocational programs is also examined. The related topic of <u>school-business collaboration</u> deals with the nature of contacts between educational, vocational, and bureaucratic personnel and employers and organized labor. This area also includes employers' opinions of workers.

Another new category identified in the literature is program composition which defines the composition of special education programs according to demographics: gender, race, ethnicity, socioeconomic status, bilingual status, type of special program, and handicapping condition.



Issues and activities that take place outside the school but deal with educational outcomes are categorized <u>outside</u> the classroom. This area includes homework completion, impact of television viewing, and involvement in extracurricular activities.

Student rating of the school continues to include studies that measure students' rating of the type and usefulness of particular programs, the value of education, and the physical layout of the school.

A new area, labeled <u>postschool adjustment</u>, includes studies that measure the postschool adjustment of students in terms of income, type of job, education, marital status, living arrangements, and prediction of postschool adjustment. This area includes follow-up studies of students from a variety of selected schools.

Post-secondary education studies include college preparatory programs, predictors of success in college, details of college programs, and the plans and outcomes of full-time college freshmen with disabilities. Career education reviews literature concerning the composition of career education programs, program effectiveness, and career aspirations of handicapped students.



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Finally, educational/transitional programming includes articles that discuss the theory of transition philosophies, and programs and services within educational institutions, the community, and other countries.

Sample Description

Number of articles reviewed. The following descriptive analysis is based on 56 of the 176 articles contained, thus far, in the literature review. The articles chosen for analysis meet the requirements of the educational outcome variable stated in Chapter 2. The analysis covers 33 new articles plus the 23 articles from last year's volume.

Handicapping condition. The handicapping conditions appearing in the 56 articles dealing with educational outcomes are illustrated in Table 3. The frequency of all the handicapping conditions exceeds the number of actual studies as many studies include more than one handicapping condition in their samples. Additionally, a number of documents are reviews of numerous studies or conceptual in nature, covering practically all handicapping conditions in one document.

The most common handicapping conditions discussed in the educational outcome literature are learning disabilities: in reports the samples include subjects with learning disabilities. A number of other handicapping conditions were



<u>Table 3.</u> <u>Distribution of Education Outcome Studies</u>
<u>By Handicapping Conditions</u>

HANDICAPPING CONDITIONS	NUMBER OF STUDIES
Learning Disabilities	35
Speech Impairments	17
Mental Retardation: mild	17
moderate	13
severe/profound	11
Serious Emotional Disturbance	14
Hearing Impairments	21
Orthopedic Handicaps	15
Other health Impairments	10
Visual Handicaps	15
Multiple Handicaps	11
Deaf-blindness	9
Educationally at Risk	9

well represented in the literature, including hearing impairments (21 documents), mild mental retardation (17), and speech impairments (17).

Handicapping conditions reported in 10 to 15 documents include visual handicaps, orthopedic handicaps, moderate mental retardation, severe/profound mental retardation, serious emotional disturbances, multiple handicaps, and other



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health impairments. Each of deaf-blindness and educationally at risk conditions were contained in less than 10 documents.

Some studies included nonhandicapped subjects in their samples, usually students, or educational and vocational personnel (Norton & Belcher, 1984;, Trachtman, 1986; Piuma, 1980).

The articles reviewed in this volume are more evenly distributed across all handicapping conditions than those in the 1986 volume. All handicapping conditions are represented, with a marked increase in the number of studies that included subjects with moderate and severe/profound mental retardation and hearing impairments. Table 4 gives the number of subjects and a description of the samples in each study reviewed.

<u>Demographics</u>. Samples vary greatly in size--from 4 to 729,019 subjects. The study that used the largest sample was a study of bilingual trends in special education programs (Bernal, 1983). Another study that used a large sample (300,000 subjects) was a study of full-time college freshmen with disabilities (Hippolitys, 1985).

Subjects ranged in age from elementary school to adult, but the majority were 16 to 24 years. Studies that included



<u>Table 4.</u> <u>Sample Sizes and Descriptions for Studies with Educational Outcomes</u>

REC#	SIZE*	SAMPLE DESCRIPTION
1	100	Young white learning disabled adults.
11	234	Graduates of special education
15	98	programs. Graduates from the class of 1972-1978
		handicapping conditions include: mildly MR, hearing impaired, orthopedically handicapped, and visually impaired.
20	18	Adolescents identified as emotionally disturbed were interviewed 2-4 years after leaving a facility for the behavior disordered.
32	43	Students with learning disabilities.
36	14	Nation-wide sample of hearing impaired students.
37	52	Adolescents identified as LD in a special education program.
38	40	Adult males with dyslexia.
49	36	Children with language impairments articulation-impairments.
50	24	Follow-up studies of persons with learning disabilities.
54	439	Sample taken from the 26,147 twelfth graders responding to survey of <u>High School and Beyond</u> study. The sample is composed of those answering affirmatively to the presence of a
55	192	specific learning disability. High school students with visual impairments.
56	37	15 from a study of 49 children identified as deaf-blind done in the early 1970's. 22 from regional centers for the Deaf-Blind. Ages 14-20 yrs, primarily white (79%) and living in residential schools (47%).
59	50	36 males/14 females aged 13-20 years, diagnosed as having a communication problem.
64	686	Sample of 686 sophomores from 27,104 for whom data from H.S.B. were complete identified themselves as either deaf or hard of hearing. Two categories combined and comparison between normal hearing and hearing impaired basis of study.
- Sample size	was not	1dentified.

^{* -} Sample size was not identified.



 \mathcal{F}_{G}

Table 4 cont'd

REC#	SIZE	SAMPLE DESCRIPTION
65	810	Sample taken from the 30,030 sophomores responding to the survey of High School and Beyond study. The sample is composed of those answering affirmatively to any of the questions concerning a specific learning disability. Sex and SE status controlled.
66	278	Sample taken from the 26,000 twelfth graders responding to the survey of High School and Beyond study. The sample is composed of those answering affirmatively to the presence of speech disabilities.
67	514	Sample taken from the 26,145 twelfth graders responding to the survey of High School and Beyond study. The sample is composed of students indicating that they were deaf or hard of hearing, two categories were merged under hearing impaired.
68	489	Sample taken from 30,030 sophomores responding to survey of <u>High School and Beyond</u> study who indicated that they had a speech disability.
73	*	Survey of graduates with handicaps: disadvantaged and limited English proficiency, as compared to their non-specific needs peers.
77	61	Description of pop. at Mark Twain, which serves students with emotional impairments in grades 5-12, based on review records of 333 and assess. of success of former students in regular schools based on 61 students leaving Mark Twain in June '80 or '81.
81	1,966	Students labeled as learning disabled receiving educational services in 24 different schools in 22 states, aged 6.0-17.9 years.
82 89	* 1,543	Sample description not given. A national group of 1543 students over the 3-year period from 1971 to 1974 were tested on reading and math with
93	*	the Stanford Achievement Test. Sample description not given.



Table 4 cont'd

REC#	SIZE	SAMPLE DESCRIPTION
96	121	60 LD and 61 NLD participated from the class of 1978-79.
98	82	39 students with learning disabilities and 43 students without learning disabilities from grades 8 and 10 selected from six representative schools in a large lower to upper-middle class metropolitan school district.
103	9,449	The sample was made up of students requesting special administrations of the SAT from 1978-1983.
105	234	The sample included 58 boys and 46 girls in the 6-11 age group and 75 boys and 55 girls in the 12-18 age group. The sample was chosen based on subjects scores on an intelligence test and an adaptive behavior instrument.
107	1,192	The subjects in this study were categorized into four disability groups: hearing impaired, learning disabled, physically handicapped, and visually impaired.
112	*	Sample description not given.
113	127	The subjects aged from 15 to 20.
114	125	The sample consisted of 125 subjects (63 LD and 62 NLD) who had been out of high school from two to seven years. The subjects were chosen from two Kansas school districts which together represented a full range of socioeconomic backgrounds.
116	4	Subjects were four female students, labeled EMR, who took part in secondary level special education programs and attended a secondary school for students with mild handicaps. All subjects scored less than 20% on all banking baseline measures.
118	300,000	Subjects were first time, full-time college freshman at a national sample of 546 institutions of higher education.
119	225	Currently enrolled or previously enrolled students in the Michigan School for the Blind and the Michigan School for the Deaf.



Table 4 cont'd

REC#	SIZE	SAMPLE DESCRIPTION
121	1,641	The subjects in this project are 12- to 1.7-year-old boys.
122	105	Survey of graduates of the Model Secondary School for the Deaf from 1971
123	146	to 1977. High school graduates with learning disabilities, behavior disorders, and regular class high school graduates who had been out of high school for almost 3 years.
128	*	The sample includes public schools, and all types of private schools where schooling terminated with a high school diploma.
141	729,019	The sample was drawn from 18% of the school districts in the state. The racial/ethnic groups reported are American Indian, Asian, Hispanic, and Black.
142	*	Numerous research studies are cited.
143	*	The sample consisted of 96 of the 97 SELPA's in California in 1981-82. The ethnic/racial groups reported from the sample American Indian, Asian, Black, and Anglo.
151	49	4 major categories of personnel were surveyed: general and vocational educators, organized labor representatives, governmental personnel, and professional association members.
152	370	The sample consisted of 288 high school teachers (246 regular and 42 special
153	*	education) and 82 college teachers. The population surveyed was the handicapped population of the U.S. Data are often broken down by sex and race/ethnicity.
154	85	Local education agency personnel randomly selected nationwide were involved in the study.



Table 4 cont'd

REC#	SIZE	SAMPLE DESCRIPTION
155	92	Eleven groups of students with mult. handicaps, ages 17-21, from 2 high schools were included in the study. Students IQ scores ranged from 34 to 120, reading grade equivalents ranged from 1.0 to 11.9 and math grade
156	*	equivalents ranged from 1 to 6.9.
157	*	Sample description not given.
158	42	Sample description not given.
		The sample consisted of school administrative staff, professional support people, teachers, instructional aides, and community employers.
159	*	Many studies were examined.
161	182	The sample had a mean age of 13, ranging in age from 6.6 to 19.8 years, a mean hearing level of 70 dB, normal intelligence, and a mean reading level of grade 4.3.
152	745	The subjects for this study included 143 administrators with responsibility for secondary special education programs, 323 high school spec. ed. teachers, and 279 parents of high
164	1,292	school students with mild disabilities. The subjects are the graduates and age-outs from 1976 to 1981 from 15 Washington school districts.

subjects who exceeded the age limits were those with the bilingual (Bernal, 1983), low socioeconomic (Brosnan, 1983), and ethnic compositions of special education programs in California (Wright & Santa Cruz, 1983).

Other studies including subjects who exceeded the age limits of 16-24 years were those that treated significant topics in the transition literature, and in some studies,



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the age limits were not relevant, for example reviews of research or theoretical discussions (e.g., Gresham, 1982; Phelps, 1986).

Location and level of studies. The majority of the studies used either local (19 documents) or national (17 documents) level samples. Only 11 studies included state level samples. The location and level of each of the educational outcome studies is presented in Table 5.

Review of Literature on Educational Outcomes

This synthesis will expand the concepts in Volume 1 and will review the literature in the newly identified domains pertaining to educational outcomes. Considering the expanded definition of educational outcomes, the literature reviewed in Volume 2 represents a wider variety of topics.

The academic achievements of handicapped youth are significantly lower than those of nonhandicapped youth. In the Gregory, Shanahan, and Walberg (1985) analysis of High School and Beyond data, students with hearing impairments, speech problems, or learning disabilities scored significantly lower in all tested subjects, including reading, writing, vocabulary, civics, science, and mathematics. Recognizing the limitation that the High School and Beyond study dealt only with self-reported handicapping conditions,



Table 5. <u>Level And Location Of</u>
Studies On Educational Outcomes

REC#	LEV(LOC)	REC#	LEV(LOC)
1	LO (AL)	96	IO (DI)
11	ST (CO)	98	LO (PA)
15	LO (CA)	103	LO
20	LO (DC)	105	NA
32	LO (NY)	107	ST (IL)
		107	NA
36	NA	112	
37	LO (PA)	113	ST (HA)
38	LO (MI)	114	LO (KS)
49	ST (IA)	116	LO (RS)
50	NA	118	NA
		110	MA
54	NA	119	ST (MI)
55	ST (FL)	121	NA
56	LO (AL)	122	LO (DC)
59	ST (OH)	123	LO (IL)
64	NA	128	NA (IL)
		120	NG.
65	NA	141	LO (CA)
66	NA	142	RS (CH)
67	NA	143	LO (CA)
68	NA	151	NA
73	ST (CA)	152	LO (NY)
			20 (1.1)
77	ST (MD)	153	NA
81	NA	154	MS
82		155	LO (IL)
89	NA	156	\ /
93		157	
KEY:		158	LO (CA)
LO - Local		159	RS ` ´
ST - State	Study	161	LO (QU)
MS - Multip	ole State Study	162	ST (OR)
NA - Nation	al Study	164	ST (WA)
MA - Meta A			• •
	ch Synthesis		
() - Stat	e Abbreviation		

it is worthwhile to note that many other studies support the idea that students with handicapping conditions do not achieve academic success as easily as their nonhandicapped

peers (Curhs & Donlon, 1984; Gottsman, 1979; Hall & Tomblin, 1978; Leone, 1984; Levin, Zigmond, & Birch, 1985; ; Norman & Zigmond, 1980).

The use of standardized assessment instruments to measure achievement levels may be a contributing factor to this In their national study of students with hearing finding. impairments, Wolk and Allen (1984) comment on the current lack of longitudinal achievement studies that use tests specifically adapted for handicapped students. In a study that examines the psychometric characteristics of Scholastic Aptitude Test, a nationally administered college entrance examination, (Elliot, Rock, & Kaplan, 1985), it was found that students with visual and physical handicaps achieved mean scores generally comparable to those of students taking the SAT in national administrations. However, students with hearing and visual impairments had lower mean scores than their nondisabled peers.

Another factor frequently examined within this group of studies was the effect that specialized program placement had on academic achievement and school completion for handicapped youth. Gross (1984) found improved grades, increased attendance, and improved eligibility for graduation by students with emotional disturbances who had been mainstreamed after placement in a specialized program.



In a study supporting the positive effects of special programs (Levin, Zigmond, & Birch, 1985), students with learning disabilities who also had severe reading and mathematics retardation, grade delay, and low IQ scores, made three times the amount of progress in reading and twice the amount of progress in mathematics during their first year in a specialized program designed for them. Four years later, this experimental group continued to show academic gains, although at a more gradual rate.

Not all studies confirm these optimistic findings, however. A follow-up study of 40 adult males who were diagnosed as dyslexic during childhood (Frauenheim, 1978) found severe residual learning problems in reading, spelling, and arithmetic skill attainment even though many special services were provided during their school-age years. In a five- to seven-year longitudinal study of reading achievement among a group of children with learning disabilities, Gottesman (1979) found that the measured achievement gains in reading support the premise that academically related deficits persist over time in populations with learning disabilities.

Some studies showed that students with handicaps fare no better in the affective outcome areas. Hiebert, Wong, and Hunter (1982) found students with learning disabilities had



substantially lower academic self-concepts and academic expectations than students without learning disabilities. This study also showed that these lower self-concepts and expectations were being supported by their parents and teachers: both parents and teachers of students with learning disabilities reported lower expectations than those of students with no disabilities.

In the series of studies by Gregory, Shanahan, and Walberg (1980, 1984, 1985, 1986, in press), students with learning disabilities, speech impairments, and hearing impairments were all found to score lower on indices of motivation. Sophomores with learning disabilities were found to have lower indices of adjustment, locus of control, and self-perceptions of attractiveness and popularity. A vast majority of the subjects also scored low on indices of self-esteem.

In a study of affective outcomes, Gresham (1982) questions the social adjustment of students who are mainstreamed. He cites numerous studies that show that the mainstreaming of children with handicaps in regular classrooms: (a) does not increase social interaction between children with handicaps and those without; (b) does not result in increased social acceptance of children with handicaps by those without handicaps; and (c) does not encourage children with handicaps



to model the behavior of children without handicaps. Gresham suggests that children with handicaps should complete a social skills curriculum before entering regular classes in order to increase their chances for successful social interaction and peer acceptance.

The affective outcome literature also addresses the problems of school drop-outs. Studies differ on the success of predicting school drop-out. Zigmond, Thorton, and Kohnke (1986) claim that students both with and without learning disabilities who are at risk of dropping out may be identified with considerable accuracy much earlier than ninth grade—by means of information readily available to school personnel. Levin, Zigmond, and Birch (1985) used a stepwise discriminant analysis of student data available upon their entrance into high school to predict students' status during their senior years. In contrast, they found their method was quite poor at identifying students who would leave school.

A postschool study of 100 young adults with learning disabilities found that the best predictors of grades completed were the presence of dropouts among peers, number of absences before referral, and grade point average before referral. In another study of adolescent problem behavior, Keilitz, Zaremba, and Broder (1979) provide evidence to



support the relationship between learning disabilities and juvenile delinquency.

Several studies deal with the effectiveness of vocational training in preparing students for the work force. Boyce and Elzey (1978) discovered that students with handicaps who participated in vocational training were employed at a higher rate after graduation, experienced a greater degree of job satisfaction, and required less training and supervision than those students who had not participated. In this study the students suggested improvements in the program including increased technical instruction, counseling, discipline, and individual attention.

In the area of vocational assessment, Stodden, Meehan, Hodell, Rissoner, and Cabege (1986) found little relationship between information collected through vocational assessment and information in similar categories in the IEP, in classroom lesson plans, and in work-study placements and goals. This inconsistency of information is unfortunate, considering that Fardig, Algozzine, Schwartz, Hansel, and Westing (1985) suggest the need for teachers to provide a variety of vocationally relevant activities such as the development of career skills, evaluation and assessment of abilities, and IEP development.



In the related area of school-business collaborations, Trachtman (1986) found that although the incidence of business-school partnerships is on the rise, business has not attempted to fill in the gaps left by cuts in Federal spending. This nationwide, in-depth telephone study also found that school-business interactions occur most frequently in vocational classes that emphasize "employability skills." The study also found that school-business interactions are initiated most frequently as a result of the interest and resourcefulness of an individual teacher.

Several studies have found that certain ethnic minority groups are overrepresented in special education programs. In studies that examined special education programs in California, Brosnan (1983) found that black students were overrepresented in mental retardation and specific learning disability programs, and Wright and Santa Cruz (1983) found that in one fourth of the 96 Special Education Local Planning Areas (SELPAs) in California, black students were overrepresented in programs for the mentally retarded and the speech impaired, and in nearly two-thirds of the SELPAs, in specific learning disability programs. In a study of the national handicapped population White, Plisko, and Stern (1985) found that black students were disproportionately represented in special programs.



A similar pattern occurs for the limited-English proficient (LEP) students. Bernal (1983) states that school systems that do not have bilingual programs are forced to use special education programs to educate LEP students. The result is that many LEP handicapped children are underserved. Bernal recommends that schools separate their bilingual and special education programs and make a special effort to recruit minority and bilingual professionals.

Rating of schools by students was identified as an area of research in Volume 1 and is again considered here. In a study of the adequacy of high school preparation for the adult adjustment of youth with learning disabilities, Messerer and Meyers (1983) found that students desired additional scaining in job specific skills and in writing checks. In general, the subjects felt unprepared to cope with "everyday living." The students reported that classes in mathematics, English, and special and vocational education helped them the most with life after high school.

In a study that compared the attitudes of students with and without learning disabilities toward school, vetter-Zemitzsch (1983) found that both groups reported "knowing how to study" as the greatest difficulty encountered in high school. Students with learning disabilities said they had a higher degree of difficulty with attendance, getting along



with teachers, and "my own personal problems" than did their counterparts. The learning-disabilities group also believed that the academic areas (math, English, science, history) were the most important areas of a secondary school curriculum, whereas their peers without learning disabilities rated occupational guidance and preparation most important.

In a study of the Model Secondary School for the Deaf, Uno and Petty (1979) also found that graduates of MSSD would have liked more emphasis on reading, writing, and the development of study skills while in school.

Many studies investigated the postschool adjustment of individuals with handicaps in terms of job type, job satisfaction, life satisfaction, income, and coping skill. (Articles in this category report outcomes that can be crosslisted under categories such as rating of their school, academic training, and program composition.) In a statewide follow-up survey of 234 graduates of special education programs in Colorado, Mithaug and Horiuchi (1983) obtained results that supported the recent trend of placing individuals with handicaps in resource classrooms a few periods during the school day. The study showed that the students from resource classrooms achieved greater occupational success than respondents from self-contained classrooms or work study programs.



In a theoretical article, Horn, O'Donnell, and Vitulano (1983) discussed the problems associated with the most widely used research methodology in postschool adjustment studies—the follow-up study. They cite the problematic trend of follow-up studies that produce conflicting results. By analyzing the various methodologies used in existing studies, the authors show why the research has produced inconsistent results and how some of these inconsistencies can be resolved.

We found a limited amount of research in the post secondary educational adjustment of persons with handicaps. Comparatively, vocational education appears to receive a disproportionate amount of attention. In designing studies on postschool adjustments, researchers should consider that many individuals with handicaps are capable of completing post-secondary education, although some require a little extra assistance, but it is this assistance that one should be trying to identify and provide.

In an evaluation of selected high school students with visual impairments that was conducted by the Florida State University Counseling Center over a 10-year period, Monohan, Giddan, and Emener (1978) found that 75% of the students had good potential for successful college work. A follow-up study showed that only 25% had been successful in completing



their degrees. In an attempt to reduce the drop out rate, a "College Orientation Program for the Visually Handicapped" was developed. The program offered peer counseling, integration into the sighted college community, and better mobility training.

The literature on career education contains proposed models of career education. Brolin (1979) suggests that classroom teachers should integrate the knowledge, skills, and attitudes necessary for employment with their subject matter areas. Brolin and Kolstoe (1978) summarized research that evaluated the effectiveness of various curricular approaches and their components. They concluded that schools should initiate comprehensive career education programs that combine total school rescurces, community participation, and family involvement.

An interesting evaluation of special services was found in the area of educational/transitional programming. In the study of the current status and effectiveness of Oregon's secondary special education services, Benz and Halpern (1987) found that: (a) very few districts were using written interacency agreements or providing other incentives to secure the involvement of community agencies; (b) there were considerable discrepancies between administrators and teachers over who was responsible for transition planning; (c) teachers



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wanted more and better parental involvement at all levels of the school program; and (d) follow-up studies of previous students were rare.

Future Research Directions

In academic training and vocational education, researchers could play an important role in improving the instruction of students with handicaps. By concentrating on identifying the strengths, not just the weaknesses, of students with learning disabilities and other handicaps while they are in school, we can have a place in the development not only of academic and personal achievement, but also in improving the self-concept and confidence of these students.

Researchers and educators should also study how to aid individuals in identified problem areas such as academics and study skills. It is not sufficient to label students in this way, and then not go further in their education. In such attempts, there must a concern for the interaction that the person's disability has with the academic environment that may magnify the study skills beyond the problems one would find in nonhandicapped individuals.

In future studies of educational cutcomes, the assessment methods of special education programs that contain a disproportionate number of minority students and limited-English-



proficient (LEP) students need to be examined. Indeed, by the very nature of their cultural upbringing, the minority students are already at risk in the present academic structure, and this should not be exacerbated by mislabelling them as learning disabled or educationally at risk without some change on the part of the education system to accommodate their experiences and backgrounds. This could lead to a poorer education for these children, and a misdirection of the special education funds.

In career education and post-secondary education, more research is needed on the success of different career education and college preparatory programs. Most important, the program components responsible for their success need to be identified. Also, district wide programs for implementing special program and transition services need to be developed in order to ensure and sustain organized and successful service delivery.



Employment Outcomes

Employment is the primary outcome associated with transition. In her now famous position paper, Will defined transition as "an outcome oriented process encompassing a broad array of services and experiences that can lead to employment" (1983, p. 3). In a society where a high value is placed upon individual productivity, it is recognized that successful integration and independence for persons with handicaps can be achieved only if they are full participants in the work force.

The interest in transition came on the heels of the discovery that our special education students were not faring very well once leaving the mandated services of public education. Throughout the nation, all young adults, regardless of handicapping conditions, continue to face significant problems in making a successful transition from school or unemployment to work. We have heard the widely quoted figures of the ICD/Harris Poll (1986) regarding the employment integration of persons with handicaps:

1) Two-thirds of all Americans with handicaps between 16 and 64 years of age do not work.



- 2) Only one in four work full-time; another 10% work part-time. This is the smallest proportion of any group working, including young Black people.
- 3) 65% of those individuals not working want to work, and 96% are not even in the labor force.

It is of interest to examine what persons with handicaps perceive as their barriers to work. The ICD/Harris pollsters (1986) found that:

- 1) 40% of working persons with disabilities who are not working or are working part-time say that employers won't recognize that they are capable of working full-time;
- 2) 40% of this group say that a <u>lack of available jobs</u> in their line of work, or their <u>ability to find jobs</u>, are important reasons why they don't work full-time;
- 3) 38% of those surveyed say that <u>being undereducated</u> and <u>having no marketable skills</u> hinder them from working full time;
- 4) three out of ten say that, for them, <u>lack of accessible</u> or affordable transportation is an important barrier to work;
- 5) 23% of those not working or working part-time say that they don't have the necessary equipment to help them work or communicate with others.

These data underscored the concerns of persons with disabilities, their families, and service providers that the



entitlement to a public education does not automatically lead to normal opportunities for employment. In 1983, the Office of Special Education and Rehabilitative Services announced competitive employment of youth with handicaps as a major federal priority. Current information about the postschool employment status of youth with handicaps is critical for planning, allocation of resources, and evaluation of school programs and adult service systems. In an attempt to gather information, the literature search has focused this locating studies that examine the nature and extent of the employment outcomes achieved by youth with handicaps since the passage of the Education for All Handicapped Children Act of 1975. Although attempts have been made to focus on youth in transition, a number of studies of the employment outcomes of adults with handicaps have also been included to provide additional information about the outcomes of transition.

Categories of Outcomes

The following descriptive analysis is based on 90 of the 176 articles gathered, thus far, in the literature data base. These articles have been coded as having "employment outcomes" as their primary focus. In our search of the literature, the variables used to define employment outcome were: employment status, job profiles, earnings, fringe benefits, stability of employment, and job satisfaction. The most frequently included variables in the reviewed literature were



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employment status, income, nature of job, unemployment rates, retention rates, job satisfaction, work history, number of hours employed, and methods of job attainment (see Table 6).

Table 6. Employment Outcome Variables Represented in the Literature

Number of Studies	
56	
40	
33	
10	
14	
12	
11	
15	
10	

In addition to the list of variables shown in Table 6, 36 other variables related to employment outcomes are mentioned in the articles. Most of these variables (e.g., job termination, fringe benefits, transportation, union participation) are mentioned in nine or fewer articles. The existence and diversity of these variables demonstrates not



only the variability in definition across studies, but also the difficulties involved in defining employment outcomes for youth with handicaps.

Sample

Number of articles reviewed. An attempt was made to review articles that examined variables of employment outcomes for all 10 handicapping conditions of interest in this study. The distribution of handicapping conditions represented in the 90 articles that focused on employment is shown in Table 7. The number of special populations noted (356) exceeds the number of studies reviewed (90) because some studies included several handicapping conditions.

Handicapping condition. The largest concentration of articles reviewed in both 1986 and 1987 dealt with persons with mental retardation (134). Other handicapping conditions represented in the samples included learning disabilities (35), orthopedic handicaps (33), emotional disturbances (28), hearing impairments (27), visual impairments (22), multiple handicaps (22), and other health impairments (20). A smaller number of studies were found on students with speech impairments (18), deaf-blind students (12), and students who are disadvantaged or educationally at risk (10). Efforts to locate and review studies across all handicapping conditions will continue in 1988.



<u>Table 7.</u> <u>Distribution of Employment Outcome Studies</u>
<u>By Handicapping Condition</u>

HANDICAPPING CONDITIONS	NUMBER OF STUDIES
Learning Disabilities	35
Speech Impairment	18
Mental Retardation: mild	48
moderate	45
severely/profound	41
Serious Emotional Disturbance	28
Hearing Impairments	27
Orthopedic Handicaps	33
Other Health Impairment	20
Visual Handicaps	22
Multiple Handicaps	22
Deaf-blindness	.12
Educationally at Risk	10

Demographics. The sizes of the samples ranged from 16 to 348,954, with a median size of 288. Ages of the subjects ranged from 16 to 70 years. Public school students constituted the largest group across all studies, followed by public school graduates and school leavers, clients of adult service providers, and adults with handicaps who were not clients of adult service providers.



Information on sex and ethnicity of the sample was often not included in the articles, but some generalizations about these demographic variables can be made. In those studies that provided information on sex, males outnumbered females by a ratio of 3 to 2. In those studies that provided information on ethnicity, information was collected for Black, white, and Hispanic groups. Table 8 provides sample sizes and descriptions for each reviewed article.

Location of Studies. Of the 87 studies focusing on employment outcomes, 38 were done at the local level, 27 at the state level, and 12 at the national level. Eleven articles synthesized information from several levels. The various levels and locations in which the studies were conducted are given in Table 9.

Review of Literature on Employment Outcomes

Fifty-three of the studies reviewed were concerned with the employment status of handicapped youth and adults. Table 10 presents a summary of the 15 studies in which actual employment rates were reported. These rates ranged from 12% to 89%. While the average results are similar to those found in the 1983 U.S. Commission on Civil Rights (50-80% unemployment), the figures should be viewed with caution. Factors that confound a clear analysis of employment status are discussed below.



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Table 8. Sample Sizes and Descriptions for Studies with Employment Outcomes

REC#	SIZE*	SAMPLE DESCRIPTION
2	50	27 students with mild and moderate handicaps who graduated from a special
3	113	school and 23 from a mainstream school. Students with mild handicaps living in rural Florida.
4	194	Former students of special education classes who had left school during
5	462	Youth with mild handicaps who exited
6	234	high school between 1979 and 1983. Youth with handicaps who completed
7	63	special education services in 1978. Individuals with moderate and severe handicaps placed in employment positions.
8	117	Transition age young adults, 17-24
9	167	years old. 18-66 years old, mean age of 30, mean
10	100	IQ of 50, median IQ of 49. 52 males and 38 females who were graduates from the work/study program
14	243	from 1966 to 1980. Individuals with mental retardation who left school, graduated, or dropped
16	32	out between 1980 and 1983. High school graduates identified as
17	54	TMR and SP retarded. Students identified as MR, LD and
18	160	health impaired. Adults who were identified as EMR in the 1920's and 30's compared to their
21	*	non-special needs contemporaries. Sample description not given.
22	300	Parents of students identified as MR who had left special education programs
23	1,176	Sample was made up of high school students and graduates labeled: LD, MR emotionally disturbed, hearing impaired, orthopedically impaired, visually handicapped, multihandicapped
24	155	and deaf-blind. Clients with MR utilizing a special job placement program over a six year period.

^{* -} Sample size was not identified.



Table 8 cont'd

REC#	SIZE	SAMPLE DESCRIPTION
25	98	The base survey consisted of subjects with visual impairments who had used special services and were now out of
26	*	school for a period of 3 to 13 years. Attempted evaluation of work study programs for students with mental
27	155	retardation. Participants with MR who were placed in competitive employment and who had a
29	225	mean IQ of 50 with a range of 27 to 78. Primary criterion for inclusion was discharge from HSRC between January, 1966 and June, 1968. Clients had a variety of handicapping conditions.
30	79	Graduates of a public school for children with orthopedic handicaps.
31	58	People identified as severely disabled epileptic were placed in competitive employment.
33	48	Residential students with cerebral palsy.
34	229	Adult clients with physical disabilities.
35	1.64	Residential students with physical handicaps.
39	50	Vocational placement programs.
40	21	Young adults identified as learning disabled.
41	122	Clients with handicaps seeking employment.
42	92	Clients with handicaps placed in industrial jobs.
43	242,000	Adults identified as blind and low vision.
44	42	Adolescents with epilepsy.
45	53	Persons identified as psychiatrically
		handicapped in a psychosocial rehabilitation program.
46	75	Former residents of a public facility.
48	1,139	Adult clients with handicaps involved in a rehabilitation program.
52	*	Review of various studies, including information from U.S. Bureau of the Census. Focused on the U.S. population with hearing handicaps aged 16-64.



Table 8 cont'd

REC#	SIZE	SAMPLE DESCRIPTION
53 57	1,700	Patients with cerebral palsy Describes a study by Voc. Rehab Center in PA to follow 500 recent graduates with learning disabilities and a
58	108	comparable group of graduates without disabilities for three years. Two samples with 49 and 59 subjects from 14 school districts were interviewed in 1969. Each sample was one year out of school. Data also collected from 43 federally funded
60	53	work/study programs. 21 women, 32 men, mean age at placement of 27.9, range of handi- capping conditions, all considered developmentally disabled, workshop
61	108	employees, mean IQ of 56.1. 47 subjects diagnosed as LD during elementary or secondary school, 59 young adults not labeled as LD and therefore not receiving special
63	80	services. Former students in special ed. programs were randomly selected from a list of 400 attending 10 Minneapolis high schools between 1966-1972. 49-males, 31-females, aged
70	57	19-21+, 73% had Former rehabilitation clients with a variety of handicaps: physical or medical, intellectual, and emotional disabilities. 38 of their employers also completed the Minnesota Satisfactoriness Scales for the study.
71	38	Contributors ranged in age from 15 to 60+ and had various handicaps: physical, emotional, mental retardation, and alcohol dependence.
72	176	92 graduates, 48 parents, and 36 employers participated in the survey. Those surveyed had a variety of disabilities: MR, multi-handicapped, emotionally impaired, LD as well as orthopedic disabilities.



Table 8 cont'd

REC#	SIZE	SAMPLE DESCRIPTION
75	71	Target population of 117 students with hearing impairments who completed education at Harper between 1977-1980 with 71 completed surveys returned after March 1981 mailing.
7€	*	Case study illustrating NTTD intentions to offer educational programs that are responsible to labor needs of U.S. economy by using DOT.
78	*	Individuals with disabilities between ages of 20 and 64 who have not been institutionalized.
78	*	Individuals with disabilities between ages of 20 and 64 who have not been institutionalized.
79	44	Participants ranged in age from 17 to 25+ and had a visual handicap combined with other disabilities which made them ineligible for other mehabilitation programs.
87	30	Former students who were enrolled in secondary special education programs during 1976, 1977, and 1978. Sample was composed of 9 females and 21 males. Sample mean IQ of 82.5.
88	40	High school graduates who are mildly MR, and a low functioning non-retarded control group from the 1971-1973 graduating classes.
90	*	Sample description not given.
91	73	The sample consists of 53 participants placed in competitive positions, 27 in PWI positions (7 placed in both). 36% women, 64% men and an age range 18-57 (mean=26.9), and an IQ range 27-101 (mean=54.8).
92	64	The subjects in this study are 64 job placement personnel at 93 sheltered workshops in 11 western states.
97	426	426 persons with severe handicaps at the supported employment placement center were surveyed.
99	*	The various sample populations include administrators, parents, teachers, students who are not handicapped, and students with the conditions listed.



Table 8 cont'd

REC#	SIZE	SAMPLE DESCRIPTION
100	20	A total of 20 clients enrolled in a prevocational training program at a state institution for the mentally retarded participated in
101	42	this study. Subjects were all graduates of a regional vocational technical high school program for the handicapped. The sample consisted of 31 male and 22 female subjects. They ranged in age from 17 to 21 at time of graduation.
102	348,954	The studies reported upon in this chapter included persons with a wide variety of handicapping conditions from birth to age 70. The sample sizes ranged from 280 to 348,954.
106	134	Of the 134 individuals served, 58(43%) have a secondary handicapping condit.
108	311	Of the 311 subjects, 124 are females and 187 are males. Each one has an IQ score of 80 or above.
109	284	The sample consisted of 60% males, 40% females, 30% black, and 12% Hispanic. The average age was 20, average IQ of 64, and 86% had not taken any classes
110	437	as part of the regular curriculum. The sumple, mbination of the control and e perimental groups, consisted of 57% males and 43% females. At baseline 81.7% were living with parents and 27.1% possessed independent financial management skills.
111	*	Four different samples were studied, one consisted of 455 subjects with mental retardation, another of 329 clients with MR. The third consisted of 57 neighbors of persons with MR and the last of 39 elderly persons.
115 117	*	Sample description not given. The sample was the national population and included persons aged 16-64, who were not in institutions, and, who
120	191	reported one or more disabilities. Students who had graduated or left a career training program during the '75-'76 academic year.

Table 8 cont'd

REC#	SIZE	SAMPLE DESCRIPTION
125 126	* 53	Numerous samples were studied. The subjects ages ranged from 18 to 59. 83% were mentally retarded, 17% had a learning disability, 30.2% had only prevocational or special education.
127	100	There were 50 subjects in the sheltered workshop sample and 50 in the supported work sample. The SW sample had a mean age of 35 years and the SWS sample had a mean age of 28.
129	1,047	Data were obtained on 1047 clients as a result of questionnaires completed by workshop staff. In addition, 322 workshop clients were also surveyed to validate the workshop data.
130	16	Data were gathered on 16 individuals with handicaps. In addition, 45 employers were interviewed. Of the 16 individuals with handicaps: 11 were male, 5 female and 14 classified EMR.
138	65	The sample included 34 males and 31 females and 23 members between the ages of 8 and 29.
139	*	Sample description not given.
140	14,830	The sample was composed of the 1980 high school sophomores who had been surveyed in the base year, first follow-up, and second follow-up of the <u>High School and Beyond</u> Study.
144	301	The sample consisted of 3 groups with MR and 1 non-MR. 56 were dischargees from institutions, 100 were rehabilitation clients, 59 were "rehabilitated" MR clients, and the final 86 were "rehabilitated" clients without MR.
146	70	Cases of successful job adaptation for workers with handicaps are described.
147	*	The study consisted of 250 interviews, 75 site visits, and 500 document reviews. Five countries in Western Europe were selected because of their contrasting approaches to integration and employment.



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Table 8 cont'd

REC#	SIZE	SAMPLE DESCRIPTION
148	2,100	Vocational rehabilitation agencies who place adults into integrated settings and/or provide sheltered employment.
149	35	The sample consisted of 35 individuals with severe disabilities who owned or used personal computers at work or home. 118 computer software and hardware manufacturers were also surveyed.
150	*	Numerous sample types and sizes were studied. The report contains descriptions of all samples/populations studied.
160	*	Sample description not given.
163	86	Of the 86 subjects in this study, 44 are teachers of secondary level students in the Missouri State Schools for Severely Handicapped and 42 are employers in food service and janitorial occupations in Missouri.
167	58	The sample consisted of subjects 16 to 21 years of age who attended a large urban psychosocial rehabilitation center. The sample consisted of 71% males and 29% femules.
170	*	Numerous studies are examined.
171	90	Initially the sample for the pilot program consisted of approximately 90 subjects.
172	100	25 employed adults, 25 unemployed adults, 25 high school students with disabilities, 25 high school students without disabilities.
173	50	25 high school students identified as learning disabled and 25 control students. Ages ranged from 10th to 12th grades and work experience from 0 to 6 jobs.
174	3	Three high school seniors with learning disabilities from a midwestern city of 60,000 served as trainees.
175	2	High school students from a midwestern city of 60,000 served as trainees.



Table 9.

Level and Location of Studies on Employment Outcomes

REC#	LEV (LOC)	REC#	LEV (LOC)
2	LO (WA)	61	LO (KS)
3	LO (FL)	63	TO (MN)
4	• •	70	• •
	LO (WA)		
5 6	ST (VT)	71	LO (CT)
6	ST (CO)	71	LO (MD)
7	ST (VA)	75	LO (IL)
8	ST (VA)	76	NA
9	ST (VA)	78	ST (WI)
10	LO (MO)	79	ST (NY)
14	ST (VT)	87	LO (IL)
16	ST (PA)	88	LO (IL)
17	NA	90	RS
18	LO (CA)	91	LO (OH)
21	NA	92	MS
22	ST (VA)	97	NA
2.2	cm /tit/\	99	DC
23	ST (WA)		RS
24	ST (VA)	100	ST (AZ)
25	ST (WI)	101	LO (MA)
26	NA	102	RS (TT)
27	LO (VA)	106	ST (IL)
29	LO (AR)	108	ST (PA)
30	LO (PA)	109	MS
31	LO (MI)	110	MA
33	ST (MN)	111	MA
34	LO (MA)	115	RS
34	no (m)	210	110
3 <i>5</i>	ST (SD)	117	NA
39	ST (WA)	120	LO (KS)
40	LO (WA)	125	RS
41	LO (DC)	126	LO (HI)
42	LO (CT)	127	LO (IL)
43	NA	129	ST (UT)
44	LO (WA)	130	LO (WI)
45	LO (FL)	138	LO (MA)
46	ST (WI)	139	NA
48	LO (PA)	140	NΛ
40	TO (TH)	740	
52	NA	144	LO (DC)
53	ST (MO)	146	LO (WI)
57	ST (PA)	147	N.A
58	ST (OR)	148	MS
60	LO (OH)	149	MS
	· · · · · · · · · · · · · · · · · · ·		



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Table 9 cont'd

REC#	LEV(LOC)	REC#	LEV(LOC)
150 160 163 167 170	NA ST (MO) LO (IL) RS	171 172 173 174 175	ST (VT) LO (KS) LO (KS) LO (KS) LO (KS)

KEY:

LO - Local Study ST - State Study MS - Multiple State Study NA - National Study	MA - Meta Analysis RS - Research Synthesis () - State Abbreviation
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The first factor affecting a clear notion of employment status rates is the definition of "working." Wehman (1985) defines competitive employment as working for at least minimum wage, with nonhandicapped workers, and with no subsidized wages of any kind. This definition is not uniformly accepted, however, and the studies represented in this review use a range of interpretations of employment levels. Some include only competitive levels of employment; others include sheltered and subsidized employment. studies include both part-time and seasonal work in their definitions; others report data on only full-time (35 hours or more) work. Whenever the part-time versus full-time distinctions were made, they have been included under employment status (in parentheses) in Table 10.



Table 10.

Employment Status

Level and Location	Handicapping Condition	Sample Size and Description
al. Local (FL)	mild handicaps, mi MR, LD or SED	N=113 former public school students 35% Female 65% Male 58% Black 43% White Age: median=19.1 X Rural Urban Metropolitan
al. State (VT) STATUS = 55% time)	mild handicaps LD, SED, mi MR	N=426 former special education students who left school between 1979-1983 37% Female 63% Male Black White Age: 14-23 X Rural X Urban X Metropolitan Suburban
al. State(CO) STATUS = 69% time)	cross cat.	N=243 special ed. graduates (1978- 1979) 35% Female 63% Male Black White Age: median=22.4 43% Rural 57% Urban Metropolitan Suburban
	Location al. Local (FL) STATUS = 43% STATUS = 55% time) al. State(CO)	Location Condition al. Local (FL) mild handicaps, mi MR, LD or SED STATUS = 43% al. State (VT) mild handicaps LD, SED, mi MR STATUS = 55% time) al. State(CO) cross cat.

cross cat....study surveyed across all handicapping conditions LD.....Learning Disability

mi MR.....Mild Mental Retardation

mo MR.....Moderate Mental Retardation

s/p MR.....Severe and Profound Mental Retardation

SED..... Serious Emotional Disturbance



Table 10 cont'd

Study	Level and Location	Handicapping Condition	Sample Size and Description
Wehman et al. (1982) Record #7 EMPLOYMENT STATUS	Local (VA)	mo MR or mult.	N=63 subjects drawn from adult day programs for MR Female Male Black White Age: average=30 Rural X Urban Metropolitan
Wehman et al. (1985) Record #8 EMPLOYIENT STATUS	State (VA)	mo, s/p MR	Suburban N=117 subjects from public schools for MR 47% Female 53% Male 46% Black 54% White Age: 17-24 X Rural X Urban X Metropolitan X Suburban
Wehman et al. (1985) Record #9 EMPLOYMENT STATUS	State (VA) = 43%	mi, mo, s/p MR with secondary disabilities	N=167 34% Female 66% Male Black White Age: 18-66 Rural Urban Metropolitan Suburban

Table 10 cont'd

	Level and <u>Location</u>	Handicapping Condition	Sample Size and Description
•			
Coonley et al. (1980) Record #10	Local (MO)	mi MR	N=100 graduates of public school work/study
, "			programs
EMPLOYMENT STATUS	= 89%		38% Female 62% Male
•			Black
			White Age:not given
•			Rural
·			Urban X Métropolitan
ga ^M ara a service se	·		Suburban
Hasazi et al.	State (Vi')	mi, mo MR	N=243 school
(1985)			leavers from
Record #14			regional
EMPLOYMENT STATUS	_ 424		special ed.
(21% full time)	= 438		classes
(216 Idii time)			39% Female
. *			60% Male
w * *	•		Black
*			White
•••			Age: 11-23
e e e e		•	X Rural
•			X Urban
			X Metropolitan
			Suburban
	Mational	LD, mi MR,	N=54 from Nat'l
Seitz	•	other health	Longitudinal
(1982)		impairments	Surveys (NLS
Record #17		!	Youth)
ž.	_		40% Female
EMPLOYMENT STATUS	= 54%		60% Male
4			33% Black
•			55% White
			13% Hispanic
			Age: 9th grade +
			Rural
			Urban
			Metropolitan
			Suburban



Table 10 cont'd

Study	Level and	Handicapping	Sample Size and
· 	Location	Condition	<u>Description</u>
Wehman et al.	State (VA)		` · · · · · · · · · · · · · · · · · · ·
(1985) .	bcace (VA)	mi, mo, s/p	N=300 school
Record #22		MR	leavers between
Record #22			1979 and 1983
EMPLOMMENT OF			42.7% Females
EMPLOYMENT ST			57.3% Male
(28.6% With	out part-time and	' heltered)	49% Black
			49% White
			Age: 17-21
_			X Rural
-			X Urban
•			Metropolitan
•			Suburban
Edgar et al.	State (WA)	cross cat.	N=1,292 former
(1986)			special ed.
Record #23			students
		.	34% Female
EMPLOYMENT STA	ATUS = 58%		66% Male
		•	Black
			White
			Age: 19-21
			Rural
•			Urban
			Metropolitan
			Suburban
Brickey et al	Local (OH)	cross cat.	N=53 employees
(1985)	•		from sheltered
Record #60			workshops
			40% Female
EMPLOYMENT STA	TUS = 34%		60% Male
			Black
		•	White
ż.			
_			Age: 19-57
			Rural
ı			Urban
			Metropolitan
rickey et al	Local (OH)	MR	Suburban
1982)	TOORT (OII)	TIN.	N=53
ecord #91			36% Female
1171			64% Male
MPLOYMENT STA	TITE - 409		hge: mean = 26.9
" THURLIAN DIA	エレン ― 48 %		IQ: mean = 54.8

Table 10 cont'd

Study	Level and Location	Handicapping Condition	Sample Size and Description	
Quanty. (1977) Record #120	Local (KS)	HI	N = 91	
EMPLOYMENT STATUS	S = 82%			
Tracy. (1979) Record #129 EMPLOYMENT STATUS	State (UT) 5 = 47%	LD, MR, ED	N = 1,047	

To illustrate the impact of changing definitions of work on employment status, Mithaug et al. (1985) reported that 69% of the respondents in the statewide follow-up study in Colorado were working. When part-time work was excluded, the figure dropped to 37%. Hasazi et al. (1985) reported similar results in a statewide study in Vermont. The employment rate of the sample was 55%, but when the full-time status was reported separately, it was 37%. In their statewide follow-up study in Washington, Edgar and Levine (1986) included sheltered workshop placements in their definition of employment for an overall employment rate of 58%. Such disparate findings make it imperative to view results within the context of the definition of employment used in .ch study.

The sample composition of each study must also be considered when interpreting employment research. Kiernan

and Bruininks (1986) described the variety of definitions for developmental disabilities and the resultant difficulty in collecting reliable employment information about population. After reviewing more than 50 studies in this area, the authors concluded that definitional problems severely limit aggregation of data across studies development of generalizable conclusions. Ill-defined. cross-categorical samples, and a concentration mentally retarded leave information gaps about the employment status of youth with other handicapping conditions. The need for further follow-up studies that focus on more narrowly defined handicapping conditions has been expressed by both Bellamy (1985) and Edgar (1985). There is also a need to examine the employment status of nonhandicapped cohorts so that a true assessment of the status of workers with handicaps can be made. A few studies referenced, as a comparison point, the employment figures for nonhandicapped youth at the local level, but most did not. The Washington state follow-up study (1986) and Mertens and Seitz (1982) study are two examples that include the employment status of the parallel nonhandicapped cohorts.

In spite of the definitional problems discussed above, some general conclusions can be derived from a synthesis of the research articles on employment status. Bowe (1983) concluded that the average working-age American with a

handicap is about 50 years old, has a high school education, is not in the labor force, and subsists on a low level of income. Kiernan and Bruininks (1986) arrived at a similar conclusion, namely that adults with handicaps have an extremely high probability of not being in the labor force.

Several studies noted that the grim employment situation described above may be changing, and that the status of persons with handicaps is improving as employment opportunities in integrated settings increase. The effectiveness of transitional training, supported employment, and competitive placement is demonstrated in several studies. Representative of most of these studies is Kiernan, McGaughey, and Schalock (1986), who found that there was an increase in the placement of adults with developmental disabilities into integrated work placements. These placements reflected a variety of occupational categories. The economic benefits realized through integrated employment are greater than those from sheltered employment, both for the individual and for society. Studies also reported a higher level of job satisfaction among workers in integrated settings compared to that of workers in sheltered settings (Little, 1979; Seltzer, 1984). The presence of a work experience curricula in high school, the use of effective training strategies on the job, and appropriate social-interpersonal behavior were found to be highly related to success on the job for persons with



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handicaps (Brickey, Browning, & Campbell, 1982; Foss & Peterson, 1981; Mitra, 1976; Redding, 1976).

Lam (1986) produced findings that ran counter to those of other studies. By comparing two random samples of workers with handicaps, one group from sheltered workshops and another from a supported work program, in terms of client characteristics, program effectiveness, cost effectiveness, satisfaction. job Workers in both programs comparable characteristics. The results suggested that the sheltered workshop program was more effective than the supported work program in terms of the number of hours worked by clients, with no differences in earnings. Workers in both programs expressed a high degree of job satisfaction. supported employment programs increase in number, more of these types of studies are anticipated and welcomed.

When we consider our own jobs or those of our colleagues, income is probably one of the most important factors. A few of the studies reviewed looked at income as an outcome variable. Income analysis is plagued with the same problems in definition and the lack of a nonhandicapped control group discussed earlier. Overall, most persons with handicaps are employed at sub-minimum or low wage jobs. The highest income level was reported in a local study in Tacoma, Washington by Gill (1984). Although most of the cross-categor_cal sample



was employed at or below minimum wage, a small percentage (7%) earned in excess of \$1,200 a month.

In addition to low income levels, subjects received fewer, if any, raises and fringe benefits. In their study of 300 adults with mental retardation in Virginia, Wehman et al. (1985; reported that 70% of the subjects received no sick benefits, 66% no vacation benefits, and 97% no profit sharing. They reported that 16% received free meals, a fringe benefit that was often mentioned in other studies.

Although no firm conclusions can be drawn from the data concerning the effect of vocational educational programming on earnings, Hasazi et al. (1985) and Mertens and Seitz (1982) indicate positive relationships between high school vocational classes and higher wages. Hasazi and her colleagues also reported that holding a part-time outside job during high school related positively to earnings. It should be noted that in the Vermont study, this relationship was true for urban locations only, and was more significant for males than females. Further research is needed to replicate these findings in more detail, and in a variety of settings represented in the design. Additionally, research needs to be conducted on specific programs and teaching strategies that lead to employment and advancement within the job setting for youth with handicaps.



Income levels varied consistently across the studies with regard to gender. When this factor was examined, female subjects earned consistently less than male subjects. An example of this difference was given in the Washington statewide study (1986), where 60% of the males but only 32% of the females earned \$135.00 a week.

A number of studies examined the nature of jobs held by individuals with handicaps. The majority of studies reported that workers with handicaps were most likely to be employed in service, unskilled, or semi-skilled occupations. The exception was found in Cook's (1976) Wisconsin statewide study of persons with visual impairments; 21% of the persons in this study represent the only workers with handicaps, in the articles catalogued thus far, to break into the professional, technical, managerial, or official fields.

The initial findings of Edgar and Levine (1986) indicate a concentration of persons with severe mental retardation in sheltered and service occupations. A wider variety of job types for the persons with learning disabilities and behavior disorders was also reported. In a related study, Fisher and Harnisch (1987) found that persons with handicaps reported lower career aspirations than the nonhandicapped sample, and they were seemingly supported in their lower aspirations by the significant others around them. These antecedents to



career selection and placement may be important to full understanding of the employment patterns of persons with handicaps.

In a statewide follor-up of persons with mental retardation, Hasazi et al. (1985) provided evidence of the effects of location on the type of job available. Clerical occupations were held by 18.2% of the sample in metropolitan areas, whereas none were held in rural areas. Likewise, 37.5% of those respondents living in rural areas worked in structured occupations, whereas no respondents from metropolitan areas held those types of jobs. More research is needed on contextual factors associated with employment patterns for handicapped youth to increase our understanding of these findings.

Studies obtaining information on employer satisfaction with employees who are handicapped largely concur that the findings are positive. Tarr and Lewis (1977) found that 93% of employers of persons with physical handicaps reported that they were willing to hire another worker with handicaps. In a similar study, Riccio and Price (1984) found that 69% of the employers of workers with mental retardation rated these workers "as good as" or "better than" other new employees. Given the high unemployment rates associated with persons



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with handicaps, the best defense may be to collect and publicize more of such information.

Technology and policy are two areas of hope and change regard to employment for persons with handicaps. with Research is beginning to examine the impact of both of these In a study of 35 individuals with severe disabilities who use computers at work or at home, Bowe and Little (1984) identified several advantages and problems associated with the use of computers as aids to employment. Robert Gaylord-Ross (1987) studied patterns of vocational integration for persons with mental handicaps in five European countries and discovered several findings that have direct impact upon policy development. It was found that nonsheltered employment for persons with mental handicaps is likely to continue and expand in countries that have effective placement and training programs. Although the initial impetus for such programs may emerge from political movement with charismatic leaders and demonstration sites, the durability of such programs will depend upon their institutionalization in policy regulation. Such legislation may include economic incentives for employers, quotas, or affirmative action policies, and statutory funding for employment agencies.



Over the course of its five-year funding period, the Transition Institute at Illinois has assumed responsibility for collecting data and follow-up studies related to employment, independent living, and educational outcomes for handicapped youth. It is hoped that the information from this data base will provide a long-term examination of the multiple factors that result in employment success for handicapped youth. Using this information to support the direction of programs will be a step toward reducing the current low ra'es of participation in the labor force, the concentration in the secondary labor market, the lack of full-time employment, and the low level of wages received by handicapped youth.



Independent Living Outcomes

In the first edition of <u>Transition Literature Review on</u>

<u>Educational, Employment, and Independent Living Outcomes</u>

(Harnisch, Chaplin, Fisher, & Tu, 1986), a limited number of articles were available for consideration. Of those studies, there was a lack of consistency in the definition and use of the term "independent living." Consequently, that chapter focused on several specific points: a brief history of the development of independent living; the development of a working definition; and an analysis of the articles, with an emphasis on those areas in which it appeared that further research was needed.

This chapter reviews the identified articles on independent living. The framework used to organize these articles is based on the operational definition of independent living developed in the first volume of our review:

Independent living will be considered to be the active ability to:

- undertake self-advocacy, self-care and personal maintenance behaviors;
- 2. live in accommodation with no, or limited, supervision by outsiders;
- 3. seek and undertake competitive employment, training, or education;
- 4. travel within the community using public or private means;
- 5. use community services and facilities as any other member of the community;



- 6. participate in community recreation and leisure activities;
- 7. interact with other members of the community on an equal basis (Marnisch et al., 1986, pp. 60-61).

Based on the principles of autonomy, empowerment, and the personal control over one's life, this definition looks at various domains of behavior that have been identified as necessary for independent and autonomous functioning as a community member, but that are not usually consolidated into one definition in the research and training literature. It is considered to be the "active ability" in these domains, because independent living requires that the person utilizes his or her abilities, breaking the reliance and dependency on others that has characterized so much of the work in this area.

By specifying a number of domains in defining independent living, Harnisch et al. (1986) provided a framework within which to analyze the current literature and to identify those domains that were underrepresented. This framework will be utilized to continue the analysis of the expanded range of literature which is available for this volume of the Transition Literature Review.

In addition to proving an organizing framework for the analysis of articles, the definition has helped to identify the associated keywords in the development of the literature



review data base. As it has identified specific domains of independent living, this has led to a more focused search of independent living research articles. Thus, the new articles added to the data base and reviewed below were chosen because they provide more empirical studies of independent living. There are also additional articles added which represent theoretical discussions about various aspects of independent living or various populations of the handicapped who are striving for their autonomy.

Literature on Independent Living Outcomes

Categories of Outcomes

The definition of independent living used in these analyses provides a way of categorizing the various studies and reports into seven specific domains of behaviors and abilities that are necessary for a person to function in society as an autonomous individual. These domains were:

(a) advocacy and skills, (b) living arrangements, (c) employment and training, (d) mobility and transportation, (e) use of generic services and facilities, (f) recreation and leisure, and (g) community interaction.

The distribution of studies across these domains is shown in Table 11, where the outcome most frequently studied among the 25 articles on independent living reviewed is that of advocacy and self-care skills, closely followed by the living



Independent Living Outcomes

arrangements of the subjects. At the low end of the scale is the study of the patterns of leisure and recreation for the handicapped. Also low in number are studies reporting on competitive employment and training (but this nust be looked at cautiously as many of these studies may be under the literature review sections which primarily focus on education or employment outcomes).

TABLE 11. Independent Living Outcome Variables
Represented in the Literature

VARIABLE	NUMBER OF STUDIES	
Advocacy and Skills	14	
Living Arrangements	13	
Generic Services	8	
Mobility and Transportation	8	
Employment and Training	6	
Leisure and Recreation	5	
Community Interaction	10	

The examination of advocacy and self-care skills, and living arrangements as the most commonly studied variables can be seen as a problem in the use of our definition. Although a number of studies consider these variables, they often are limited to a restricted range of behaviors within



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the wider and more fully autonomous meaning implicit with. 1

the definition.

A number of variables were mentioned in the articles which were not directly specified in our definition of independent living. The most important of these are: a) the quality of life of those living independently, b) their financial situation, and c) their satisfaction with services provided by various agencies. The first two of these can be seen as combinations, or even antecedents, of the present definition; the third is really a way to evaluate the service delivery rather than to analyze independent living.

Sample Description

Handicapping Condition. The sample populations of the various studies can be described in several ways. The first is to examine the handicapping conditions of the subjects. As Table 12 indicates, the most common handicapping condition among the subjects of independent living studies is mental retardation—with the vast majority of studies examining the independent living outcomes of this group. The remaining handicapping conditions all have about the same number of studies, except those with learning disabilities, speech impairments, and persons who are educationally at risk—all of which have no studies reviewed.

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<u>Table 12.</u> <u>Distribution of Independent Living Studies</u>
<u>By Handicapping Conditions</u>

CONDITION	NUMBER OF STUDIES
Learning Disabilities	1
Speech Impairments	0
Mentally Retardation mild	13
moderate	13
severely/profound	11
Serious Emotional Disturbance	2
Hearing Impairment	2
Orthopedic Handicaps	2
Other Health Impairments	2
Visual Handicaps	4
Multi-handicaps	4
Deaf-blindness	1
Educationally at Risk	0

This concentration on the independent living outcomes of those with mental retardation was recognized in the previous edition of <u>Transition Literature Review</u> (Harnisch et al., 1986) as a potentially detrimental foc.:. The group with mental retardation itself is not homogeneous (with mild, moderate, and severe categories), and there is reason to expect that the experiences and needs of other groups with handicaps in attempting to live independently may be quite different.



Demographics. One may also examine the nature and sizes of the samples from each study to determine who and what are being measured. These descriptions are presented in Table 13 for the studies in independent living. The size of samples of subjects with handicaps range in number from 3 to 557 persons, and the methods include questionnaires and interviews, observations of behavior, and studies of documents and case records. Several of the studies that record small numbers of subjects are actually surveys of administrators and staff of various facilities about the needs and satisfactions of the clients of these facilities.

A number of other articles that are reported as having no subjects are reviews of the literature, reports and descriptions of programs, or position papers of theoretical importance to independent living.

Location and Level of Studies. A description of these articles in terms of their locations and levels are given in Table 14. Where possible, the state and local studies are identified by the state in which they occur, although this is not always reported by the authors.

Review of Literature on Independent Living Outcomes

The review in this volume is based on 26 articles that focus on independent living outcomes. Although most of the



Table 13. Sample Sizes and Descriptions for Studies with Independent Living Outcomes

REC#	SIZE*	SAMPLE DESCRIPTION
`28	300	Students with MR who had left school between 1979 and 1983.
47	66	Adult clients identified as severely disabled.
51	18	Adults identified as mentally retarded
62	503	leaving a residential institution. Individuals discharged from 10 state schools for the retarded during 1968-1972, majority were ages 16-34, mean IQ of 43 for low ability group, 67 for high ability group.
69	251	Adults (high school and older) with severe visual impairments.
74	*	Adolescent individuals labeled as: blind, deaf-blind, blind-MR, and blind
80	66	orthopedically impaired individuals. Adolescents who are disturbed and aggressive; the majority of whom came
83	557	from minority groups. Sample consisted of mainstreamed individuals with hearing impairments attending public school.
84	153	The subjects ranged in age from 18 to 55+, comparisons were made between the adjustment of older and younger persons with MR after deinstitutionalization and entry into community life.
85	69	Clients with MR who were placed into independent housing.
86	77	Adults with MR ranging in age from 18 to 57+. Each had been placed in community homes after being deinstitutionalized. Participants were "unsuccessful" and returned to the institution.
94 95	* 186	Sample description not given. One hundred and eighty-six students with mental retardation (134 males and 52 females) at the Minnesota Learning Center participated in a three-year study.

^{* -} Sample size was not identified.



Table 13 cont'd

REC#	SIZE	SAMPLE DESCRIPTION
124	*	A group of students with handicaps at Middlesex County Vocational and
131	85	Technical High School. The subjects were members of the mid-Nebraska CBMR program who were placed into independent housing and competitive employment in 1979-81. Their average age is approximately 35
132	*	years old. This study was a meta analysis of over 100 single-subject studies of persons with mental retardation.
133	85	Adults with mental retardation. Adults with mental retardation placed into independent housing and competitive employment 8 to 10 years ago were evaluated. Average age was 30 years. Average full scale IQ was 67.
134	. 38	of the 38 subjects 20 were female, 18 were male. Ages ranged from 20-67 with a mean of 34. IQ scores ranged from 22-97 with a mean of 54.
135	384	The post-school sample consisted of 384 former students from special education classes who had been out of school one year. The follow-up sample consisted of 200 students in special education
136	3	classes preparing to leave school. The sample consisted of three males, 17, 18, and 20 years of age. The two youngest subjects were severely mentally retarded, and the oldest was considered moderately mentally retarded.
137	*	This article synthesizes numerous studies related to the assessment of leisure skill competencies and selection.
16.	399	A follow-up of those who had graduated from independent living training center over previous 6 year period. 20-24 years old with average stay of 9 months.
166	130	130 of 345 surveys to administrators of independent living centers completed.
168	*	The paper reviewed literature concerning consumer satisfaction evaluation. No samples were used.



Table 13 cont'd

R EC #	SIZE	SAMPLE DESCRIPTION
169	_ 0	The subjects were consumers that used the center's services.
176	83	Follow-up of students with mild retardation were surveyed in 1962-63 at the age of 15, and were interviewed again in 1977-78.

studies report findings and evaluations related to domains of independent living, others take a different approach. A number of the articles reviewed specific training programs. Several articles were evaluations of the quality of life of persons with handicaps, and theoretical papers.

Jones, Petty, Boles, and Mathews (1985) surveyed the administrators and staff of a number of independent living centers to compare the outcomes of those that were funded federally and those funded privately. The federally funded centers differed from the others in terms of the numbers of staff, especially those with handicaps; they served a wider range of disability groups; and they provided different types of services: more focus on outreach, community relations, individua! advocacy, and community advocacy. The other independent living centers were more likely to offer housekeeping, long-term residence, medical treatment, and sheltered employment as direct services.



Table 14. Level and Location of Studies on Independent Living Outcomes

REC#	LEV (LOC)	REC#	LEV(LOC)
			DHV(BOC)
28	LO (VA)	86	S1 (HI)
47	LO (WA)	94	RS (HI)
51	ST (PA)	95	
62	ST (TX)	124	, ,
69	LO (CA)		LO (NJ)
	20 (011)	131	LO (NE)
74	LO (MA)	122	
80	ST (NY)	132	NA
83	• •	133	LO
	NA	134	LO (IL)
84	ST (MA)	135	MS
85	LO (NE)		
		136	LO (IA)
KEY:		137	RS
LO - Local	Study	165	LO (MN)
ST - State	Study	166	NA
MS - Multi	ple State Study	168	RS
NA - Matio	nal Study	100	CN
		1.60	7.6 /
MA - Meta Analysis RS - Research Synthesis		169	LO (KS)
		176	LO (MN)
() - Sta	te Abbreviations		

The satisfaction of clients was measured in a study by Whang, De Balcazar, and Fawcett (1983). Specifically, they surveyed 10 clients of an independent living service to identify its strengths and weaknesses. The service's strengths appeared to lie in the areas of advocacy, counseling, publicity for independent living, transportation, and as information clearinghouses. Its weaknesses were the need for social and active support in advocacy, more communication with staff, and the need for those with disabilities to learn the advocacy skills for themselves. Each of the strengths and weaknesses represented a number of



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domains of the definition of independent living proposed as the guiding framework for this chapter. They are seen, here, as significant factors in the lives of people with handicaps.

Two other evaluations of independent living centers are provided by Clowers and Belcher (1979) and Hart, Moilanen, and Bensman (1983). Hart et al. praised these centers for the benefits that they provide, especially in challenging the dependency models that are so often applied to persons with handicaps in their lives and decision-making needs. Their review of those who have passed through the center is very positive. Clowers and Belcher (1979) look at the various outcomes and behaviors that need to be assessed when judging the success of independent living centers, not just simple aspects of grooming and self-care.

Budde, Petty, and Nelson (1984) reviewed the literature on consumer satisfaction in an attempt to understand how this would relate to the satisfaction by clients of independent living centers. Possible biases were seen in the areas of design of measuring instruments and data collection. These could come in such problems as the rias of whom answered such a survey—whether they are those who are extremely happy with the service, and wish to further promote it, or those who have major concerns and seek change. Such sampling problems could have serious impacts upon the validity and reliability



of the data collected. The strengths were in cost, practicality, and predictive value.

The criteria for successful independent living, especially for those who have been deinstitutionalized, are of serious concern. As indicated by Clowers and Belcher (1979), success is not defined simply by the basic skills held by the individual, but it is also the largest domain in this area of study because of the ways in which advocacy and skills are approached in the independent living literature.

Bell (1976) examined independent living success in terms of the subjects' IQ using a sample of persons with mental retardation. She found that the higher IQ group were more successful in attaining basic living skills and were more independent in living arrangements, transportation, and work. Similarly, Seltzer, Seltzer, and Sherwood (1982) compared the adjustments of older and younger deinstitutionalized persons and found that the younger persons had more skills and thus adjusted more readily and successfully to independent living than did the older persons.

Schalock, Marper, and Carver (1981) utilized a multiple regression approach to examine the most important factors in determining successful independent living outcomes for a sample of persons with mental rétardation. They found that

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these were in the behavioral domains of personal maintenance, communication, clothing care and use, food preparation, and community integration. Findings close to these were reported by Sutter, Mayeda, Call, Yangi, and Yee (1980) in their measures of adaptive behaviors with "fundamental self-help skills" being the most important. Conversely, maladaptive behaviors of violence and threatening behaviors were associated with unsuccessful placement.

Others have also reported similar levels of skills as important to independent living among persons with mental retardation. Loughlin (1981) indicates such behaviors as grooming and understanding monetary value. Gaule, Nietyupski, and Certo (1985) taught their group the behaviors and skills related to drawing up a shopping list and using to make supermarket purchases.

Where advocacy was identified as an important skill by a handicapped sample (Jones et al., 1985) and has also been reported by researchers as a necessary condition for the true independence of persons with handicaps (e.g., Clowers & Belcher, 1979), there is little research. Again, this may be a function of the large number of studies that relate to persons with mental retardation rather than to other handicapped groups.



The discussion of the living arrangements of the various samples of persons with handicaps again gives a rather mixed picture. Lessard (1982) has tried to develop a model of levels of independence in housing for persons with deafblindness, with ever-lessening levels of control by others. Landesman-Dwyer (1981) has reviewed much of the literature on the housing of deinstitutionalized persons with mental retardation, but the emphasis is on various types of group homes and other arrangements where there is imposed control over the lives of the residents.

Several of the studies have dealt with the adjustment that persons with handicaps face after deinstitutionalization. DeJung and Reed (1978) and Reagan, Murphy, Hill, and Thomas (1980) have compared individuals in their natural homes with others who have had different types of community placement. For Reagan et al., the greatest stability was found for those who were placed first into their natural homes rather than foster homes or group homes. But in deJung and Reed's (1978) study, those living at home had the lowest degree of satisfaction with the arrangements because of lack of autonomy as well as other family problems.

Schalock and Lilley (1986) report a follow-up study of persons with mental retardation who were placed into independent living and competitive employment 8 to 10 years

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ago and who had stayed for at least two years. They assessed categories of housing ranging from high control to full independence. Of the sample, 29% were still living independently, with the remainder of the subjects returning to more supervised housing. One should note, however, that the group that maintained its independence was seen as having higher functioning and fewer handicaps. Those who had returned to live with their parents did not do as well in the assessment of independent living.

In another form of long-term follow-up, Faretra (1981) examined the original hospital records of aggressive youths who had been hospitalized in psychiatric wards. Eighteen years later she reviewed the records of hospitals, police, and statewide data. Her findings are somewhat disturbing, in that many of these subjects still had some form of contact with mental health agencies or the police. However, as they grew older, the number of contacts declined. Unfortunately, she does not indicate the differences between those who had to maintain contact with the various agencies and those who did not.

Transportation and mobility within the community is a serious concern for many persons with handicaps. Indeed, Bikson and Bikson (1981) have indicated that the lack of transportation is a major reason that their sample of persons



with visual impairments have trouble finding or holding jobs. In Jones et al. (1985) study of the needs and satisfaction of clients of independent living centers, the availability of reliable, inexpensive transportation was identified as crucial in their adjustment. Clowers and Belcher (1979) have identified transportation as a factor that becomes far more important as the severity of a handicap increases; they believe that a number of the domains of independent living interact with the severity of a handicap to produce far more severe social limitations.

Restrictions in other areas of life may be seen as leading to poor levels of social integration, just as poor social integration is an indication of lack of success in attempts at independent living. For many, this can be portrayed as an isolated and lonely existence. Schalock, Harper, and Carver (1981) indicated that the subjects in their study had a social life restricted mainly to other members of the training program. McDevitt, Smith, Schmidt, and Rosen (1978) indicate that the 18 subjects (deinstitutionalized persons with mental retardation) in their study reported some social life, but would more often stay at home to watch television, alone. Bell's (1976) subjects reported that they had problems in developing active and rewarding social lives.

But it is not as bleak for all persons with handicaps. Libbey and Pronovost (1980) indicate that their sample of persons with hearing impairments, most of them mainstreamed in high schools, spent at least one half their free time with non-deaf friends, although they reported that there were some communication problems. For those with visual impairments, Bikson and Bikson (1981) reported there was also some participation in social and recreational activities, with the level of visual impairment limiting the degree of their participation.

An associated area of research is in the leisure behavior and patterns of persons with handicaps. As has been indicated above (e.g., McDevitt et al. 1978), the leisure activities of persons with handicaps may often be reduced to watching television, rather than participating in a wider range of more stimulating activities. Kregel, Wehman, and Seyfarth (1985) surveyed the parents and educators of students with mental retardation. The recreation activities of the students were characterized as passive, in the home with the family, or watching television. However, there were reports of other types of indoor and outdoor activities. Very few reported participation in sports.

In a practically oriented article, Wehman and Schleien (1980) describe a number of leisure behaviors and analyze the



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skills necessary to perform them. This approach allows the tasks to be assessed in light of the functional ability of a persons with handicaps, permitting the selection of the most appropriate activities for each person. A similar training idea comes from Agran and Martin (1987), who have analyzed much of the literature on different performance environments, including that of leisure and place a great emphasis on the training of self-control in the person so that he or she is able to take part in an acceptable manner.

A number of other studies have looked at various ways of assessing the quality of life for the independent persons with handicaps. Heal and Chadsey-Rusch (1985) have reported their attempts to validate and check reliability of a scale measuring the quality of life of persons with mental retardation—the Lifestyle Satisfaction Scale. In so doing, they measured various aspects of the lives and the experiences of their subjects, their satisfaction with their residences, community setting, and community services.

Schalock and associates (Keith, Schalock & Hoffman, 1986; Schalock, 1986; Schalock, Harper & Carver, 1981) have made several studies of life satisfaction with persons with mental retardation. Schalock (1986) used the Quality of Life Questionnaire to examine the influences of environmental control, social interaction, community utilization, and



family involvement. He believes that the measurements from such a scale can be used to assess the degree to which training programs meet the needs of individuals. A similar approach was used by Keith, Schalock, and Harper (1986). They reported on the use of the questionnaire with a number of different samples and discussed the implications of the findings.

In Schalock, Harper, and Carver (1981), the quality of life of was assessed with the use of a broader range of quality-of-life indicators: employment, finances, community utilization, leisure-time usage, and friendship patterns. This approach provided an in-depth assessment of the experience of independent living and what it entails.

Future Research Directions

In this volume of the <u>Transition Literature Review</u>, a broader range of articles on independent living have been identified and synthesized, which we hope will lead to a better understanding of some of the aspects of independent living. However, many concerns and many ways in which research can be directed to gain a better knowledge and understanding of the promotion of independent living in the transition from adolescence to adulthood.



One concern is the specific meanings of various domains of independent living. This chapter is based on a particular definition, yet the specifics of this definition are not delineated. This is evident in both the reviewed literature (where the definition does not always match the usage of it by researchers), and in the presentation of the definition itself, where there is no specification of what is meant by each of the domains.

Research that focuses on gaining an understanding of the underpinnings of these domains would be extremely useful. It would allow one to understand what makes up each of these domains, its subcomponents. Furthermore, it would permit us to study the differential impacts of these subcomponents on the independent living of persons with handicaps and on various subpopulations within the more general population of persons with handicaps, and to see where these groups differ from the nonhandicapped peers in these aspects of their lives. This kind of research could have great implications for designing interventions and training programs which more accurately match the needs of groups with specific hardicapping conditions.

Other areas in which research is needed are leisure and recreation, as well as community interaction. These two aspects of life are crucial for development and fulfillment,

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Independent Living Outcomes yet the available research on them is scant. Some findings are in the form of scales within life satisfaction measures, However, these do not tell much about the desires and capabilities of persons with handicaps to participate in other types of activities, nor (perhaps more important) why

Finally, the domain of advocacy appears to be critical if persons with handicaps are to gain more control over their lives and the decisions about it. The reviews of independent living centers indicated that they do a good job in advocating on behalf of persons with handicaps, but this continues to build a dependency relationship between expert and client. If true independence is the goal, then the aim must be the development of the skills necessary for self-advocacy.

they may be excluded from those activities.

SUMMARY

The Transition Literature Review; Educational, Employment, and Independent Living Outcomes Vol. 2 is a comprehensive evaluation of the literature concerned with the transition of youth with handicaps from school to adult life. The review team has selected 10 standard definitions for handicapping conditions which correspond with P.L. 94-142 guidelines: learning disabilities; speech impairments; mental retardation classified as mild, moderate, and severe/profound; hearing impairments; orthopedic handicaps; other health impairments; visual impairments; multiple handicaps; deaf-blindness; and those classified as educationally at risk.

These classifications have been juxtaposed against three major outcome areas (education, employment, and independent living), which results in a matrix of 30 cells that describe most of the reviewed articles. This has been done to provide more comprehensive understanding of the literature and to facilitate the identification of areas that appear to lack research emphasis.

A formal process for reviewing the articles has been developed by the research team. A review work sheet was designed to contain information about author(s), title, and



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publication; the primary focus of the study (education, employment, or independent living); brief memos about each of the outcome areas; descriptions of the sample size and the population that was studied; a note about the method by which the research data were obtained; and an abstract. As each article was reviewed, these work sheets were completed and filed for entry into the computer data base.

The computer software system selected by the task members was dBASE III. Its versatility and relative ease in use made it ideal for storing information from the review work sheets. The data base program enabled us to enter the information recorded on the work sheets in the same form on the computer. This capability facilitated the handling, with no ness for converting the handwritten information into any other style. This particular system also permitted the manipulation and combination of pieces of entered information for printing and analysis. The actual text of the annotated bibliography, outcome area indexes, and the record number index were generated from the data base with only slight modifications to the data base program. For more information on the data base system, see Chapter 3.

viriame 2 contains 176 articles, including 86 articles
on Volume 1 and 90 additional articles reviewed in
time. The breakdown of the total number of review



articles by outcome area is as follows: employment, 87; education, 56; and independent living, 25. The primary goals for Volume 2 were to achieve a more even distribution of articles across the three outcome areas and across the 10 handicapping conditions while maintaining an accurate representation of the existing literature.

These goals were partially achieved. The number of education-related articles was more than double those in Volume 1 bringing the number of education-related articles closer to the number of employment articles. The majority of the articles reviewed for the first time in Volume 2 were employment-related (38), followed closely by those categorized as education-related (33). However, there was still a problem in locating independent-living-related articles; only 14 new articles were found, but the total of 25 articles is more than double the number in Volume 1. terms of the handicapping conditions, a more even distribution was achieved, but studies in mental retardation and learning disabilities still greatly outnumbered the lower incidence handicapping conditions.

The data base also includes studies that are not research studies but rather reviews of research or essays that are theoretical in nature. Several studies have subjects that



exceed the age limits we set because, in our opinion, they provide significant results or conclusions.

As part of the effort to achieve a more even distribution across the three outcome areas, the review staff searched bibliographies and conference notebooks received from many regions of the Rehabilitation Services Administration. In this year's investigation, it was again noted that a serious problem consistent across all studies is the lack of uniformity and conciseness in the definitions used in each outcome area. Although much good work is done, the comparison and generalizability of the results of these studies is severely limited by incompatible or even conflicting definitions of what is being studied. In each of last year's review chapters, an attempt was made to provide a useful working definition for each outcome area.

The literature search for Volume 2 used those working definitions to help identify appropriate new articles in each of the outcome areas. New topics in the outcomes areas were also searched, and the working definitions were expanded. However, a point was made to construct accurate definitions that were not too broad. Below are summaries of each of the synthesis chapters (Chapters 4, 5, and 6, and a concluding analysis.



Education

In Volume 1 the reviewers identified five concepts or domains in the educational outcome literature: academic training, vocational training, rating of their school, activities outside the classroom, and issues of behavior. Three new domains were identified in this year's search: career education, program composition, and school-business collaborations. These new concepts demonstrate the shift away from the traditional approaches (i.e., concentrating research in the academic training area) to examining more broadly defined educational outcomes.

The 56 articles dealing with education varied greatly in focus and scope. As in Volume 1, the majority of the studies dealt with students with learning disabilities, but the literature reviewed for Volume 2 was more evenly distributed across all the handicapping conditions. Persons with speech impairments and orthopedic handicaps were represented, as were persons with hearing impairments and individuals with mental retardation. In Volume 2 more samples included nonhandicapped subjects, usually nonhandicapped students and educational or vocational personnel.

Studies of academic training showed that individuals with handicaps rated significantly lower academically than their nonhandicapped cohorts. However, these differences were



moderated in studies that examined the effects of specialized program placement on academic achievement and school completion.

Hiebert (1982) found that students with learning disabilities had substantially lower academic self-concepts and expectations than their non-learning-disabled cohorts. Other studies of educational achievement indicate success in many areas for students who had been mainstreamed after initial placement in specialized programs. The effects of vocational education on job preparedness were also examined and found to be positive.

The current search identified a number of additional studies that dealt with students' participation with school program. Students with learning disabilities reported that they had the most difficulty with their academic coursework (mathematics, reading, writing) during school and stressed the need for more emphasis and assistance with academic skills. They also would have liked more training in job specific skills and "everyday living" skills.

Vetter-Zemitzsch (1983) compared students with learning disabilities and non-learning disabled students. Both groups rated "knowing how to study" as their greatest difficulty encountered in high school. In another study individuals



with hearing impairments agreed with the previous finding that they would have liked more preparation in their academic coursework and study skills. These results seem to indicate that educational outcome research, program implementation, and program evaluation are still required in the traditional area of academic training.

Numerous studies or program composition found that black students with mental retardation, speech impairments, or specific learning disabilities are overrepresented in special programs. These findings, again, question the assessment methods used in special programs and suggest that more research is needed on the assessment procedures of these programs.

The analysis of the literature for Volume 1 dealt with vocational education and training. The review for Volume 2 examined the broader area of career education and training. One study proposed a comprehensive career education program that is composed of total school resources, community participation, and family involvement (including the integration of career education into subject matter classrooms). The number of articles concerning the impact of career education is sparse in the educational outcome literature; more research is still being devoted to vocational training and education.



Employment

Employment outcomes are often stressed most in the transition process, and the literature reviewed reflects this emphasis. The employment-related literature contains the largest number of articles (87). The emphasis is justified when one considers the results of the ICD/Harris Poll of the employment status of persons with handicaps. According to the poll, only 1 in 4 handicapped people work full time, and another 10% work only part-time. This participation rate is the smallest proportion of any group working, including that of young black people.

The employment variables most frequently identified in this area are: employment status, income, nature of job, unemployment rates, retention rates, job satisfaction, work history, number of hours employed, and methods of job attainment. Unfortunately, there is a lack of standardized definitions in the employment outcome literature. The studies do not use agreed-upon definitions for two important employment outcomes: employment status and income. Different studies use different standards for their employment rates and income calculations; thus the reported employment rates and income levels vary radically from one study to another.

Even though there is a large amount of transition literature devoted to employment outcomes, some areas are under-



represented. There is a preponderance of research on persons with mental retardation, but a comparatively few research articles which focus on persons with sensory impairments or students who drop out. In studies that provide demographic data, male subjects outnumber female students 3 to 2; however, most studies did not report differential rates of employment or income, or job type for the two sexes. Just as sex differences exist in employment for the general population, these trends should be examined in studies of employment for persons with handicaps.

Across all studies, the majority of employed subjects reported that they were employed in low-paying service, unskilled, or semi-skilled positions. Only the visually impaired subjects in a Wisconsin statewide study were reported as having had any opportunity to move into the managerial, professional, technical, or official employment fields.

In studies of gender differences, it was found that females consistently earned less than males. Fortunately, the literature identifies certain experiences that contribute to higher wages for both genders. There was a positive relationship between higher earnings and participation in high school vocational classes as well as holding a part-time

outside job during high school. However, the latter relationship was more significant for males than females.

Despite these dismal findings, it became apparent that the status of handicapped persons in the work force seems to be improving. Many studies found that there was an increase in the placement of adults with developmental disabilities into integrated work settings. The job satisfaction among workers in integrated work settings was higher that among workers in sheltered work settings. Other success criteria for individuals with handicaps in the workplace include presence of a work-experience curriculum in high school, the use of effective training strategies on the job, and appropriate social-interpersonal behavior.

Numerous studies concluded that employers were highly satisfied with workers with handicaps. One study found that 69% of employers of workers with mental retardation rated these workers "as good as" or "better than" other new employees. However, persons with handicaps reported lower career aspirations than nonhandicapped individuals. One way of improving the unemployment rates, aspirations, and self-concepts of individuals with handicaps may be to increase the publicity pertaining to positive employer ratings.



The literature on employment outcomes also includes studies relating to technology, computer use by persons with handicaps, and transition policy.

In summary, the status of individuals with handicaps in the work force is characterized by low rates of participation, concentration in the secondary labor market, a lack of full-time employment, and a low level of wages and fringe benefits. Despite these grim facts, the employment picture is brightening for persons with handicaps as they report greater satisfaction with their jobs and as employers recognize their value.

Independent Living

As was the case with Volume 1, the area of independent living outcomes produced the smallest number of sources. In Volume 2, however, there were more empirically based articles on related areas of independent living, which allowed us to draw some conclusions.

The analysis of the 25 articles is based on the working definition constructed for Volume 1. The concept of independent living is based on three principles (autonomy, empowerment, and the personal control over one's life), and identifies seven domains of independent living; advocacy and skills, (14 articles); living arrangements, (13 articles);



community interaction (10 articles); generic services (8 articles); mobility and transportation (8 articles); employment and training (6 articles); and leisure and recreation (5 articles). There were also three adjunct domains identified in the current volume: quality of life, financial situation, and satisfaction with services of various agencies.

The relatively small number of articles focusing on independent living outcomes may be due to two factors: (a) there are a limited number of studies that focus mainly on independent living outcomes; (b) many of the studies that are available are plans for program implementation or theoretical proposals rather than studies dealing with the specific outcomes of selected programs.

A majority of the independent living literature focuses on persons with mental retardation. In the area of independent living, more research is needed on individuals with other handicapping conditions because the results of studies on one group cannot be generalized to other handicapped groups.

A number of articles rated the services provided by independent living centers. In a comparison of federally funded and privately funded centers it was found that federally funded centers served a wider range of disability



groups and provided more services in the areas of outreach, community relations, individual advocacy, and community advocacy. Other studies found the strengths of independent living centers in the areas of advocacy, counseling, publicity for independent living, and transportation, and as information clearinghouses and sources of leadership challenging the dependency of the handicapped. The identified weaknesses include the need for more social and active support in advocacy, greater communication with staff, and more client independence in the area of self-advocacy.

The reviewed literature also provided a wide range of discussions on the criteria for success in independent living. Results showed that individuals with mental retardation who have higher IQ's and those who are younger acquire basic living skills and adjust to independent living more successfully. The most important criteria for determining success in independent living by the mentally retarded were also examined and included personal maintenance, communication, clothing care and use, food shopping and preparation, the understanding of monetary value, community integration, and the acquisition of "fundamental self-help skills."

Several of the studies evaluated community adjustment and social integration. In the area of community adjustment,



results and theory again vary. Reagan et al. (1980) found natural homes to be the most stable compared to foster or group homes. However, other studies found that individuals living in their natural homes scored lower on assessments of independent living and had lower degrees of satisfaction with their living arrangements than subjects living in supervised housing.

In general, the studies have shown severe limitations in the extent of social interaction and community integration, except for the placement supervisors and others in their managed living situations. Social contacts are limited, and very little time is spent in social and leisure activities such as sports. The exceptions were students with hearing and visual impairments who had been mainstreamed; these youth participated in a greater number of social and recreational activities with their nonhandicapped peers.

For most of the subjects, however, the amount of social interaction was minimal, and most leisure time was spent in isolation watching television. Wehman et al. (1980) and Agran et al. (1987) offered analyses of leisure behaviors and environments which could be implemented to facilitate the greater involvement of persons with handicaps in more active recreational and social activities.



The area of transportation and mobility is tied very closely to the topic of social integration. Several studies in the this area have cited inadequate transportation as a contributing factor to the poor employment status and community integration of persons with handicaps.

Studies that assess the life satisfaction or quality of life of persons with handicaps were also identified. These studies use written questionnaires to measure the feelings, skills, and living patterns of persons with mental retardation. The survey instruments measure satisfaction with residences and community services and the influences of social interaction and family involvement, in addition to the specifics of an individual's employment, leisure-time usage, and friendship patterns.

Research can be improved, in the future, by constructing a standardized definition and theoretical base of the concept of independent living. In addition, more research is needed in the areas of leisure and recreation, and community interaction. These are the primary areas in which any member of our society should be able to function, and from which, it appears, those with handicaps are often excluded. A better understanding of the nature and dynamics of interactions and behaviors in these domains is critical to the social and physical adjustment of persons with handicaps.



Conclusion

At the conclusion of our second year of reviewing transition literature on the educational, employment, and independent living "comes of youth with handicaps, we hope that we have provided the field with a comprehensive and thorough review of the literature.

After reviewing the findings of all three outcome areas certain findings and suggestions need reiteration. First it is imperative that scholars agree on standard definitions in their respective areas of study. These consistencies will allow more efficient research, make it much easier to compare findings, and provide more accurate and significant conclusions and syntheses.

In terms of sample composition in transition research, a stronger effort must be made to produce research on handicapping conditions other than mental retardation and learning disabilities. The results that pertain to individuals with learning disabilities or mental retardation, or any other handicapping condition for that matter, cannot always be accurately generalized to the other handicapping conditions. In order to ensure accurate conclusions and successful programs, a balanced treatment should be given to all handicapping conditions.



Researchers in the area of employment should be the first group of scholars to agree on standard definitions of the terms employment status and income. Without agreed-upon definitions it is impossible to compare and synthesize employment rates of the handicapped. The findings from these aggregated studies give us directions for practice.

Many studies have identified criteria that lead successful employment, including work experience while in high school, the use of effective training strategies on the job, and appropriate social-interpersonal behavior. information should now be applied and integrated programs that train practitioners and persons with handicaps in how to use and develop these skills and experiences to maximize employability in this population. Another action that may improve the employment status of persons with handicaps is the dissemination of the highly favorable employer ratings of workers with handicaps. These figures might persuade other employers to hire workers with handicaps, may increase public awareness of the capabilities of persons with handicaps, and improve the self-perceptions of the workers themselves.

The topic of successful adjustment to non-institutional settings is again discussed in the literature on independent living. Many studies are devoted to identifying factors that



lead to successful independent living. The studies found that communication, the understanding of monetary value, clothing care and use, food shopping and preparation, the acquisition of "fundamental self-help skills" and community integration were the factors most responsible for success in independent living, especially for those with mental retardation. As suggested in the other outcome areas, these skills should be taught and developed in training programs for practitioners and people with handicaps. The independent living experience of the participants of these training programs should then be evaluated and compared to the experiences of nonparticipants to determine the success of the training programs.

The reviewed literature contains a large number of articles about living arrangements and community interaction of persons with handicaps, but only a small number in the domain of leisure and recreation. Most of these latter studies provide data about the type of living arrangements, the amount of community interaction or leisure activity, or the life satisfaction of persons with handicaps. However, in the areas of community interaction, and leisure and recreation, two major questions still need to be answered, "Why do people with handicaps have low rates of participation in these areas?" and "What can be done to increase their success and participation?" Wehman et al. (1980) and Agran



et al. (1987) answer the second question by providing analyses of leisure activities and environments. We hope that these types of analyses will give rise to more programs that teach leisure skills and encourage participation in recreational activities.

We hope the analysis of the literature offered in this review will stimulate dialogue, research, and action in the field of transition. In future volumes of the <u>Transition Literature Review: Education</u>, <u>Employment and Independent Living Outcomes</u>, we hope to expand and improve the data base and the literature analyses. We welcome any suggestions or comments and would like to hear of any articles or sources that you would recommend for inclusion in future volumes.



Annotated Bibliography

This chapter presents summaries of the articles reviewed in Chapters 4, 5, and 6. In this bibliography, the reader will be able to see, by the way in which the articles are presented, the document arrangement that has been used in the construction of the data base. The contents of this chapter were generated directly from the dBASE III data base and then prepared for publication using WordPerfect, a commonly available word processing program.

In response to suggestions from readers of Volume 1, the bibliography has been arranged to present the articles in alphabetical order. Appendices B, C, and D contain listings of the citations of each article within its area of primary focus.

The summary sections in this bibliography enable the readers to identify quickly features that are important to them. Thus one can identify the handicapping conditions studied, sample size, make-up, and the focus of the articles on specific outcome areas. Table 15 is provides the reader with a key to the abbreviations used for handicapping conditions.



Table 15. Key to Abbreviations for Handicapping Conditions

HANDICAPPING CONDITION	ABBREVIATION
Learning Disabilities	LD
Speech Impairments	sı
Mental Retardation: mild	MR_MI
moderate	MR_MO
severe/profound	MR_SP
Serious Emotional Disturbance	SED
Hearing Impairment and Deafness	DEAF
Orthopedic Handicaps	ORTHO
Other Health Impairments	HI
Visual Handicaps	visu
Multiple Handicaps	MULTI
Deaf-blindness	BLIND
Educationally at Risk	DIS



Agran, M., & Martin, J. E. (1987). Applying a technology of self-control in community environments for individuals who are mentally retarded. In M. Hersen, R. M. Eisler, & P. M. Miller (Eds.), <u>Progress in behavior modification</u> (pp. 108-151). Beverly Hills, CA: Sage Publications.

HANDICAPPING CONDITION: MR_SP MR_MO MR_MI

PRIMARY FOCUS: INDEPENDENT LIVING STATUS
Independent living variables include: the ability to
acquire and generalize adaptive behavior in institutional,
community residential, and leisure settings.

ABSTRACT:

This article reviews the literature concerning the use of self control in community settings. The choice of settings is comprehensive including: public schools, academic classrooms; public schools, vocational classrooms; institutions; community residences; leisure skills; sheltered employment; and competitive employment. The findings of over 100 studies across these settings are presented and discussed. In general, the majority of the studies demonstrated the usefulness of self control procedures in the acquisition and maintenance of appropriate behavior. Such training provides a means to allow individuals to serve as their own change agents and subsequently enhance personal competence and independence. To enhance this training, research needs to identify the cognitive or other abilities needed by individuals who are mentally retarded to use various self-control measures effectively. Finally, the idiosyncratic effects of self-control training need to be better understood.

REC #: 132

Alper, S. (1985). Comparing employer and teacher identified entry-level job requisites of service occupations.

<u>Education and Training of the Mentally Retarded</u>, 20(1), 89-96.

HANDICAPPING CONDITION: MR_SP

PRIMARY FOCUS: EMPLOYMENT OUTCOME
This study compared the level of agreement between
employers and classroom teachers of secondary level
students with severe handicaps as to employment
requirements. The variables investigated are: worker
behaviors, self-help grooming, social skills.

ABSTRACT:

As the number of successful demonstrations of the ability of persons with severe handicaps to learn competitive job skills grows, the question of which skills to include in prevocational curriculum takes on increasing importance. Previous research, using descriptive validation assessment techniques, has identified employers' expectations of entry-level requisites for sheltered and competitive jobs. Rusch, Schutz, and Agran (1982) surveyed employers in Illinois and identified 70 skills critical for entry into service occupations. A relevant question concerns the level of consensus between classroom teachers and employers as to requirements for employment. Whether or not job requirements are consistent across regions or are locally determined remains unanswered. The present investigation compared the level of agreement between employers and classroom teachers of secondary level students with severe handicaps as to employment requirements. Missouri employers' responses were also compared to those in the Rusch et al. study. While employers and teachers were found to strongly agree as to entry-level job requisites, no significant correlation was obtained between the two groups of employers' responses. are discussed relative to vocational training program development.

REC #: 163



Asch, A. (1984). The experience of disability. American Psychologist, 39, 529-536.

HANDICAPPING CONDITION:
DIS BLIND MULTI VISU HI ORTHO DEAF SED MR_SP MR_MO
MR_MI SI LD

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment outcome variables include
comparisons of employment for men and women
with and without work disability: employment status,
percent in labor force, unemployment rates, income.

ABSTRACT :

This article presents employment data on people with handicaps, shows how social-psychological theories explain these circumstances, and proposes new directions for psychological research and service in light of the changing situation of people with handicaps in today's society.

REC # :

Barker, L. T., et al. (1986). <u>Summary of the national</u>

<u>Consensus seminar on supported employment goals and</u>

<u>performance measures</u>. San Francisco, CA: Berkeley

Planning Associates.

HANDICAPPING CONDITION:
BLIND MULTI VISU HI ORTHO DEAF SED MR SP SI

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Performance measures discussed include employment
status, earnings, hours worked, employment stability
and comparison of participant earnings with co-workers
or employees in comparable jobs among others.

ABSTRACT:

This paper summarizes the conclusions and recommendations of the national Consensus Seminar on Supported Employment Goals and Performance Measures. The seminar was structured to generate responses to a set of potential measures formulated by the Berkeley Planning Associates, and consisted of a variety of individuals connected with supported employment efforts. seminar discussed eight measurement domains: employment outcomes, quality of placement, ongoing support, worksite integration, quality of life, systems change, participant characteristics, and supported employment costs. The seminar produced suggested changes to the measures and came to a consensus on "core" measures and data items appropriate for universal implementation along with significant supplementary measures. For example, the group agreed that employment outcome data items such as hourly wage at placement, hourly wage at end of reporting period, fringe benefits received, and total hours worked during reporting period were considered "core" data items.

REC # 160



Bell, N. (1976). IQ as a factor in community lifestyle of previously institutionalized retardates. Mental Retardation, 14, 29-33.

HANDICAPPING CONDITION: MR_MO MR_MI

PRIMARY FOCUS: INDEPENDENT LIVING STATUS
Independent living variables include: marital status,
residential situation, community activities, perceived
problems in community living, contact with law, driving a
car, agency assistance.

ABSTRACT :

Many investigators studying community adjustment have included IQ as a variable. Only about one half of these have found any relationship between their criteria and IQ, and in some instances the relationship was negative. These general findings may be due in part to a restricted sampling of the IQ range, or to the use of a gross success-failure criterion of adjustment. The following report, based upon mail questionnaire data from former state school residents, reveals many differences in community lifestyle related to IQ. Additional factors which may be largely responsible for these differences are discussed.

REC #:

Bellamy, G. (1985). Transition progress: Comments on Hasazi, Gordon, and Roe. <u>Exceptional Children</u>, 51, 474-477.

HANDICAPPING CONDITION:

ABSTRACT :

Bellamy reacts to the follow-up study done by Hasazi, Gordon, and Roe (1985) on post-school employment status of, and use of adult services by 462 persons who left special education in nine Vermont districts between 1979 and 1983. This article outlines issues and research needs about the nature of the transition problem and the likely success of various strategies for improvement. Issues explored include: employment status of school leavers, post-school vocational services, employment during school, and the self-family-friend network.

REC #:



Benz, M. R., & Halpern, A. S. (1987). Transition services for secondary students with mild disabilities: A statewide perspective. The Council for Exceptional Children, 53(6), 507-514.

HANDICAPPING CONDITION: MR_MI LD

PRIMARY FOCUS: EDUCATIONAL OUTCOME
The educational outcome variable in this study is drop-out rate.

ABSTRACT:

This article reports the partial findings from a statewide study of Oregon's secondary special education programs for students with mild disabilities. The focus of this article is on the current status and satisfactoriness of districts' transition services. Subjects included the population of LEA administrators and teachers, and a stratified random sample of parents of students with mild disabilities. Results indicated that (a) very few districts were using written interagency agreements or providing other incentives to secure the involvement of community agencies; (b) there were considerable discrepancies between administrators and teachers over who was responsible for transition planning; (c) teachers wanted more and better parent involvement in all levels of the school program; and (d) follow-up of previous students was rare. Findings were compared with those of other recent research and several key elements that should be targeted for improvement were discussed.

REC #:

Bernal, E. M. (1983). Trends in bilingual special education.

Learning Disabilities Quarterly, 6(4), 424-431.

HANDICAPPING CONDITION:
DIS BLIND MULTI VISU HI ORTHO DEAF SED MR_SP MR_MO
MR MI SI LD

PRIMARY FOCUS: EDUCATIONAL OUTCOME
Educational variables studied include: representation
of minority and minority LEP children in special education
programs, and bilingual training of special education
teachers.

ABSTRACT :

Children with handicaps who are also limited-English proficient (LEP) have generally not been served adequately in the schools. practitioners are trained to diagnose and treat culturally and linguistically different children. Furthermore, in school systems which have resisted bilingual programs, special education has been enlisted to carry out the ignominious task of segregating LEP children from mainstream classrooms. As a result, a curious placement pattern has occurred whereby some LEP handicapped children are under-served whereas many normals are placed in special education. The traditional reluctance on the part of special education to recruit minority professionals and its separation from regular and bilingual education have stood in the way of progress. Nevertheless, a number of teacher training institutions are received grants to institute rudimentary bilingual special education programs with courses designed to bridge these gaps. Research developments also suggest that bilingual special education may emerge as a viable specialty within special education.

REC #: 142



Bikson, T. A., & Bikson, T. K. (1981). <u>Functional problems</u>
of the visually impaired: A research approach. Santa
Monica, CA: Rand Corp.

HANDICAPPING CONDITION: VISU

PRIMARY FOCUS: INDEPENDENT LIVING STATUS
Independent living variables include: general orientation,
mobility evaluation, social perception.

ABSTRACT:

Capabilities and limitations of 251 persons with severe visual impairments (senior high school age and older) were assessed on a range of visual environmental adaption problems to learn how they are organized and influenced. Factor analyses indicated that problems can be grouped on the basis of eight functional domains, among which an independent living skills factor accounted for most response variance. Major influences on outcomes in these domains were acuity, age, sex, education, and perceived impact of impairment on quality of life. Results suggested the usefulness of rehabilitation programs geared to activity domains rather than vision parameters.

REC # :

المُ اللَّهُ ا

Bolton, B., Rowland, P., Brookings, J., Cook, D.,

Taperek, P., & Short, H. (1980). Twelve years later:
The vocational and psychological adjustment of former rehabilitation clients. <u>Journal of Applied Rehabilitation</u>
Counseling, 11, 113-123.

HANDICAPPING CONDITION:
DIS BLIND MULTI VISU HI ORTHO DEAF SED MR_SP MR_MO
MR_MI SI LD

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment outcome variables include: employment retention
and status, income, job satisfaction, job obtainment,
unemployment rates

ABSTRACT :

A 12-year follow-up survey was conducted to assess the vocational and psychosocial adjustment of 225 former clients of the Hot Springs Rehabilitation Center (HSRC). Data collected at admission to and discharge from HSRC suggested that the clients were generally the more difficult ranabilitation cases and that most were only marginally successful in achieving their rehabilitation goals. Among the major findings of the follow-up survey were: (a) 56% of the ex-clients were working at follow-up and 73% had held some employment since leaving HSRC, (b) 49% of the ex-clients who were working at follow-up had been employed on the same job for five years or longer, (c) 60% of the working ex-clients believed that VR services were helpful in getting their jobs, (d) 73% of the former clients were not employed in occupations directly related to the vocational training that they had received at HSRC, (e) 47% of the unemployed ex-clients, and (f) counselors' ratings of psychosocial and vocational goal attainment and overall adjustment of HSRC were significant predictors of work status at follow-up and 12-year employment history. The article concludes with 10 brief case vignettes and a list of 35 significant findings.

REC # :

Bourbeau, P. E., Sowers, J., & Close, D. W. (1986).

An experimental analysis of generalization of banking skills from classroom to bank settings in the community. Education and Training of the Mentally Retarded, 21(2), 98-106.

HANDICAPPING CONDITION: MR_MI

PRIMARY FOCUS: EDUCATIONAL OUTCOME
Education outcomes include: total training time, percent
of banking steps performed correctly during simulation,
at target bank, and at novel bank.

ABSTRACT :

The extent to which simulated training approaches are appropriate for teaching functional skills to learners with mental retardation is unclear at the present time. The purpose of this study was to examine the effectiveness of a banking curriculum, taught to secondary students with mild mental retardation in a classroom setting, in producing generalized performance at a real bank in the community. A single-subject multiple baseline design with probes was used to demonstrate the functional effect of the training program. Four subjects were trained individually in a simulated bank setting at their school. Performance of savings account operations was measured in the classroom, at the bank for which the curriculum was designed, and at another bank in the community for which subjects were not trained. Results of the study show that all subjects learned the skills. After training, performance of all subjects improved markedly over baseline levels, indicating that these students were able to generalize newly trained skills to real community settings. All subjects required some additional in-vivo training at the target bank to achieve perfect performance. Weekly maintenance probes suggested that subjects retained skills when training contingencies were no longer in effect.

REC #: 116

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Bowe, F. (1983). <u>Demography and disability: A chartbook</u>

<u>for rehabilitation</u>. Hot Springs, AR: Arkansas

Rehabilitation and Training Center. (ERIC Document

Reproduction Service No. ED 037-373)

HANDICAPPING CONDITION:
DIS BLIND MULTI VISU HI ORTHO DEAF SED MR_SP MR_MO
MR_MI SI LD

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment variables include: employment status, type
of occupation, income, yearly earnings, income to
poverty line, and social security income.

ABSTRACT:

Based on data concerning disabilities that were obtained from the 1981 and 1982 Current Population Surveys (CPS), the average working-aged American with disabilities is 50 years old, has a high school education, is not in the labor force, and subsists on a low level of income. Also evident is the fact that disability is much more common among Blacks than among Whites or Hispanics, more common among males than among females, and more common among persons with low education and income levels than among those with higher levels of schooling and income. These data have a number of implications for v cational rehabilitation program administrators. The most encouraging news from the 1981 and 1982 CPS is that full-time employed persons with handicaps earn almost as much as do full-time workers with no disabilities.

REC #: 117



Bowe, F. (1984). U.S. census and disabled adults:

The 50 states and the District of Columbia. Hot Springs,

AR: Arkansas Rehabilitation and Training Center. (ERIC

Document Reproduction Service No. ED 248-403)

HANDICAPPING CONDITION:
DIS BLIND MULTI VISU HI CRTHO DEAF SED MR_SP MR_MO
MR_MI SI LD

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment measures include: size of working age
population with disabilities, labor force
population, race, and type of disability.

ABSTRACT:

This book analyzes and presents information from the 1980 Census of Population and Housing and offers state-by-state breakdowns of data on the disabled population. The 50 states and District of Columbia are divided among 10 regions. Each state is described in terms of population size, proportions of the working-age population that are disabled, labor force participation rates among adults with disabilities, variations between males and females with disabilities on employment-related indices, interactions between race and disability, and the prevalence of transportation disabilities in the working-age and over-65 populations.

REC # :

Bowe, F., & Little, N. (1984). Computer accessibility:

A study. Rehabilitation Literature, 49(9-10), 289-291.

HANDICAPPING CONDITION: VISU ORTHO DEAF

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment-related variables studied include: users'
problems interfacing with the computer, use and type of
computer peripherals. Manufactural survey results
include type of computer peripherals and special
features offered.

ABSTRACT :

Personal computers are playing a significant role in helping persons with disabilities acquire valuable job skills. However, the computers themselves often act as "lowers" to employment of qualified individuals who are disabled. article summarizes a study of 35 individuals with severe disabilities who use personal computers at work, or at home, and 118 manufacturers of computer software and hardware. The authors found that persons with disabilities would use computers effectively with the proper add-ons. However, computer hardware and software systems were often up-dated, leaving the user with disabilities unable to operate the computer effectively. The manufacturers' responses suggested that many of the problems users with disabilities reported were fairly common across different brands of computers. The authors offered four recommendations on how computer hardware and software could be made more accessible to individuals with disabilities.

REC #: 149



Boyce, D. A., & Elzey, F. (1978). A study of the vocational adequacy of former special education students following high school graduation. Sacramento, CA: California State Department of Education. (ERIC Document Reproduction Service No. ED 163 668)

HANDICAPPING CONDITION: VISU ORTHO DEAF MR_MI

PRIMARY FOCUS: EDUCATIONAL OUTCOME
Educational outcome variables studied include: the
effects of high school training with regard to employment.

ABSTRACT:

A study was made of the effectiveness of the San Francisco Unified School District's Special and Vocational Educational Programs in preparing students with handicaps for the work world. Ninety-eight high school graduates were divided into two groups - those who had received vocational training (T) and those who hadn't (NT) - and were interviewed along with their parents, employers, and former teachers. Among the findings were that more T than NT graduates had held a job since graduation and that their jobs tended to be of a higher level; that a greater percentage of the NT group were very dissatisfied with their jobs; and that T group workers needed less supervision and on-the-job training than did NT workers. Among the recommendations resulting from the survey were that there be provisions made for earlier detection of handicapping conditions in students at the elementary and junior high levels, and that continual and intensive counseling be provided for students with handicaps during high school.

REC #:



Brickey, M., Browning L., and Campbell, K. (1982).

Vocational histories of sheltered workshop employees placed in projects with industry and competitive jobs.

Mental Retardation, 20(2), 52-57.

HANDICAPPING CONDITION:
MULTI HI ORTHO DEAF MR_SP MR_MO MR MI

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment variables include: previous competitive
job experience, month-by-month work status, types
of jobs, wages, insurance benefits, reasons for leaving
job, and workshop cost-benefit analysis.

ABSTRACT :

Job placement histories of 73 sheltered workshop employees placed in Projects With Industry (PWI) or competitive jobs in calendar year 1978 are examined during a 30-month period. Of the 27 people placed in PWI positions, 48% were subsequently placed in competitive jobs. Of the 53 competitive placements in 1978, 60% were competitively employed on 7-1-80. Job variables such as structure appear to be more important to job success than employee demographic variables such as IQ. Two alternatives to individual job placements are discussed.

REC # :



Brickey, M. P., Campbell, K. M., & Browning, L. J. (1985).

A five-year follow-up of sheltered workshop employees placed in competitive jobs. <u>Mental Retardation</u>, <u>23</u>, 67-73.

HANDICAPPING CONDITION: HI ORTHO DEAF MR SP MR MC MR MI

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment outcome variables studied include: employment
status, wages ,type of job, fringe benefits,
reason for termination, hours per week, attitudes
about work.

ABSTRACT :

Personal interviews conducted in January, 1983 and agency records were used to examine month-by-month vocational histories of 53 sheltered workshop employees placed in competitive jobs in calendar year 1978. Most participants who were still employed after 4-5 years had parents who wanted them to work competitively and had a great deal of influence over them, while those who returned to the workshop or were unemployed did not have such parental support. The study also examined attitudes toward work, friends, advocates, use of community resources, and fiscal considerations.

REC # :

60

Brolin, D., Durand, R., Kromer, K., & Muller, P. (1975).

Post-school adjustment of educable retarded students.

Education and Training of the Mentally Retarded, 100, 144-49.

HANDICAPPING CONDITION: MR_MI

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment variables studied include: vocational
adjustment, types of jobs, earnings and hours per week, %
of employment since high school, reasons for leaving jobs,
barriers to employment, job satisfaction.

ABSTRACT :

A follow-up study of former students with mild retardation revealed considerable vocational adjustment problems. One major finding was the better adjustment made by those students who had received more of a work/study orientation. A recommendation for implementing Career Education programs at the secondary level is made.

REC # :



Brolin, D. E., & D'Alonzo, B. J. (1979). Issues

in career education for handicapped students. <u>Exceptional</u> Children, 45(4), 246-253.

HANDICAPPING CONDITION:
DIS BLIND MULTI VISU HI ORTHO DEAF SED MR_SP MR_MO
MR_MI SI LD

PRIMARY FOCUS: EDUCATIONAL OUTCOME
The critical issues identified in career education
include the nature of career education, its relationship
with the educational process, including mainstreaming,
special education teachers' responsibilities, and
parsonnel preparation.

ABSTRACT:

This article discusses the career education concept and its need, critical issues, and recommendations to move it as a viable educational thrust for students with handicaps. The authors contend that career education should encompass the knowledge, skills, and attitudes needed for the various life roles and settings that comprise an individual's life, including employment. will require curriculum efforts to be more extensively directed toward teaching daily living, personal-social, and occupational competencies, as well as basic subject skills. Career education includes the academic/work-study curriculum design, but it goes one more step by requiring all teachers to relate their subject matter to its career implications.

Brolin, D. E., & Kolstoe, O. P. (1978). The career and vocational development of handicapped learners.

(Information series no. 135). Columbus, OH: The National Center for Research in Vocational Education. (ERIC Document Reproduction Service No. ED 166-419)

HANDICAPPING CONDITION:
MULTI VISU HI ORTHO DEAF SED MR_MO MR_MI SI LD

PRIMARY FOCUS: FMPLOYMENT OUTCOME
Employment outcomes were measured in the area of
occupational roles of individuals with handicaps by review
of research studies.

ABSTRACT:

The state of the art in careez education for persons with handicaps was reviewed beginning with the events and developments which have aided in the growth of career education. The study examined relevant research on the occupation, citizen, family, and avocation associated with persons who are deaf, hard-of-hearing, blind, partially sighted, crippled, health impaired, mentally retarded, learning disabled, or multi-handicapped. Research conducted to evaluate the effectiveness of various curricular approaches in this field was also studied. Finally, research in the areas of teaching/counseling methods and career assessment, exploration, and preparation for persons with handicaps was reviewed. The research indicated that only now are school systems beginning to retool and initiate a comprehensive array of services: infusion of total school resources, community participation, and family involvement.

1 EC # :

Brosnan, F. L. (1983). Overrepresentation of low socioeconomic minority students in special education programs in California. <u>Learning Disability Quarterly</u>, <u>6</u>(4), 517-525.

HANDICAPPING CONDITION: DIS MR_SP MR_MO MR_MI SI LD

PRIMARY FOCUS: EDUCATIONAL OUTCOME Educational outcomes measured include: frequency distributions of school districts by percent minority and by SES rank, and mean percentage of racial/ethnic groups in special education programs, among others.

ABSTRACT:

Critics have cited that special education has served only as a vehicle for transferring urban, poor minority pupils from regular classrooms into stigmatizing classrcoms for youngsters with learning disabilities and/or behavior problems. This study was conducted to update and expand the data cited in 1974 by the plaintiffs in the "Larry P." case - that large overrepresentations of ethnic or racial minorities exist in special education programs in California. The results confirmed the earlier data and showed Black students were overrepresented in mental retardation and specific learning disability programs and that students from low-SES school districts were overrepresented in specific learning disability programs.

REC #:

Brown, L., Pumpian, I., Baumgart, D., & Vandeventer,
P., et al. (1981). Longitudinal transition plans in
programs for severely handicapped students. Exceptional
Children, 47(8), 624-631.

HANDICAPPING CONDITION: DIS SED LD

PRIMARY FOCUS: EDUCATIONAL OUTCOME
This articles focuses on the need for individualized
education programs with ideas of individualization,
comprehension, and parent involvement.

ABSTRACT :

An educational plan for students with severe handicaps is proposed in this paper. The author suggests when a child is born or becomes severely handicapped, he or she would have immediate access to educational and related services provided in the school until 21. Furthermore, the quality, nature, location, and substance of the services provided by the school should be maintained. The basic components for the issue include individualization, comprehension, parent involvement and participation.

REC #:

ERIC
Full Text Provided by ERIC

Bydde, J., Petty, R., & Nelson, C. (1984). <u>Problems</u>

and benefits associated with consumer satisfaction

evaluation at independent living centers. Lawrence, KS:

The Research & Training Center on Independent Living,

University of Kansas, Lawrence.

HANDICAPPING CONDITION:

PRIMARY FOCUS: INDEPENDENT LIVING STATUS
The problems identified with CSE include consumer
bias, validity, reliability, and sampl. . The strengths
identified include: practicality, cost, and predictive
value, among others.

ABSTRACT :

The purpose of this paper is to provide a review of the state-of-the-art consumer satisfaction evaluation (CSE) for independent living centers. First, CSE dimensions are discussed and problems and strengths are then reviewed from the literature. Some of the problem areas identified include consumer bias, validity, reliability, and sampling. Strengths include practicality, cost and predictive value, among others. The authors conclude that the CSE technology should be improved so that CSE overcomes its inherent problems while maintaining its practical characteristics. The authors suggest the use of an alternative survey instrument - the Evaluation Ranking Scale (ERS) that reduces consumer bias.

REC # :



Clemmons, D. C., & Dodrill, C. B. (1983). Vocational outcomes of high school students with epilepsy. <u>Journal of Applied Rehabilitation Counseling</u>, 14, 49-53.

HANDICAPPING CONDITION:

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment outcomes include: vocational outcomes, income
and its source.

ABSTRACT:

In the fall of 1982, 42 adolescents with epilepsy referred for neuro-psychological testing were followed 6.44 years after testing (4.55 years after high school) with respect to vocational outcome. Forty-three percent of the sample were either employed or involved in continuing education (N=18); 57% reported no competitive employment (N=24). Thirty-one percent were receiving federal living subsidies. Thirty-six percent (N=15) had received state vocational rehabilitation (VR) services, with a placement rate of 13% (N=2). The low VR placement is consistent with recent literature. The sample demonstrated lowered performance on an expanded Halstead-Reitan Battery. Significant t-test differences (p.<01) were observed between working and non-working portions of the sample on the Wechsler Adult Intelligence Scale and on percentage of neuropsychological tests outside normal limits. Similar results have been reported with adult epileptics seen at this center. discussion of priorities in rehabilitation planning and of the use of neuro-psychological testing to aid in identifying vocationally "at risk" youth is presented.

Cloninger, L. (1976). Our work study product: Does

it stand up? Paper presented at the Annual International Convention for the Council on Exceptional Children, Chicago, IL.

HANDICAPPING CONDITION: MR_MI

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment variables studied include: employment status, income, unemployment percentage.

ABSTRACT:

Attempted was an evaluation of work study programs for students with mental retardation (MR) through a follow-up of work study graduates, a survey of state departments of education, and a review of the literature. Inadequate return of a graduate rating scale, difficulty in obtaining student records, and a few inadequate answers to the state survey resulted in aborting the study. Past studies were surveyed with such findings as a higher success rate for graduates of tork-study programs with MR than graduates with MR of other secondary programs. Appended are the list of items used to rate graduates, a chart of minimum wage rates from 1967 to 1978 (projected), a summary of studies reporting wages earned, a summary of the success percentage of graduates with MR, and a chart of the percentage of employment from closure to follow-up.

REC #:

الم المراجع

Clowers, M. R., & Belcher, S. A. (1979). A service delivery model for the severely disabled individual: Severity and closure criteria. Rehabilitation Counseling Bulletin, 23, 8-14.

HANDICAPPING CONDITION: MULTI

PRIMARY FOCUS: INDEPENDENT LIVING STATUS
Independent living variables studied include: assessment
of independent living skills in functional terms.

ABSTRACT :

This article presents suggestions for severity of disability criteria and closure criteria for clients with severe disabilities being served by an independent living rehabilitation center. The suggestions are founded on experience from a three-year-old project on independent living rehabilitation. Clowers and Belcher outline measurements of physical, psychosocial, and environmental factors for inclusion in the two sets of criteria.

Cobb, M., & Crump, W. (1984). Post-school status of

young adults identified as learning disabled while

enrolled in public schools: A comparison of those

enrolled and those not enrolled in learning disabilities

programs. Washington, DC: Division of Educational

Services, Special Education Programs. (ERIC Document

Reproduction Service No. ED 253 029)

HANDICAPPING CONDITION: DIS LD

PRIMARY FOCUS: EDUCATIONAL OUTCOME
Educational outcome variables studied include: status as
graduates or dropouts, vocational & academic training
received since high school, perceived competency in
meeting societal and vocational reading demands, value of
high school.

ABSTRACT :

The study examined the post-school status of 100 young adults identified as white students with learning disabilities. Achievement scores ranged from 55% to 66% of expected grade placement. placed in LD classes seemed to evidence poorer school coping skills than did those students identified as LD but not placed. Discriminant analysis indicated that the number of retentions and the presence of others in the family with learning problems determined the discriminant function which maximally differentiated the placed and nonplaced students. Current status indicators showed the sample to be functioning quite well as adults, with students reporting moderate happiness with their employment. Highly positive ratings were ascribed to vocational education and LD classes by those who participated in them. Multiple regression suggested that the best predictors of grades completed were presence of dropouts among peers, number of absences prior to referral, and grade-point average prior to referral.

PEC #:

15.

Coleman, J. S., Hoffer, T., & Kilgorf, S. (1982). <u>High</u>
<u>school achievement: Public, Catholic, and private</u>
<u>schools compared.</u> New York: Basic Books.

HANDICAPPING CONDITION:
DIS BLIND MULTI VISU HI ORTHO DEAF SED MR_SP MR_MO
MR_MI SI LD

PRIMARY FOCUS: EDUCATIONAL OUTCOME
Educational outcomes include: .rcentage of students
reporting handicaps in public and private schools,
and mean percentage of the school's student body that
is handicapped in public and private schools.

ABSTRACT :

This short chapter compares the percentage of individuals with handicaps in public and private schools. The survey concluded that when the results are based on student self-reports, there is a small difference in the percentage of students with less severe handicaps, but a somewhat higher proportion of public school students with severe handicaps. School principal reports indicate that in the public schools the average percentage of the student body that is handicapped is over four times than that in the Catholic schools. As a reason for the discrepancy between school principal reports and student self-reports, the authors suggest that in public schools students classified as handicapped would not be classified as handicapped in private schools.

Rec # : 128

Collister, L. (1975). A comparison of the long range benefits of graduation from special vs. mainstream school for mildly mentally handicapped students. Seattle, WA: Seattle Public Schools, Department of Planning, Research and Evaluation. (ERIC Document Reproduction Service No. ED 117 870)

HANDICAPPING CONDITION: MR MO

PRIMARY FOCUS : EMPLOYMENT OUTCOME Employment variables include: employment skill levels, unemployment rates, job satisfaction.

ABSTRACT:

Twenty-seven graduates with mild and moderate mental handicaps who attended a special school and 23 graduates of special education with mild and moderate handicaps programs who attended a mainstream school were interviewed to determine the long-range benefits of each program. Interviews 1 and 2 years after graduation were designed to measure differences in employment skill levels, unemployment rates, job satisfaction, arrests and convictions, welfare assistance, financial independence, income level, and other variables. Data suggested that there was little difference in long-range characteristics for either group, although the small sample size precluded drawing firm conclusions on either side of the question.

Cook, J. J. (1976). Follow-up study of the visually impaired: 1976. Washington, DC: Eureau of Education for the Handicapped. (ERIC Document Reproduction Service No. ED 176 489)

HANDICAPPING CONDITION: VISU

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment variables include: job attainment, attitude
toward work experiences, extent of underemployment, types
of jobs, income, comparisons with total state population
as to types of jobs.

ABSTRACT:

To provide feedback on programs for individuals with visual impairments in the State of Wisconsin, a follow-up study was done on 98 persons who had been enrolled in such programs and who had been out of school for a period of 3 to 13 years. study was concerned with many facets of everyday living, including such things as academic achievement, types of occupations, physical mobility, difficulties in obtaining employment or promotions, use of vocational rehabilitation and other social services, attitudes toward educational and work experiences, and social and community participation. Among the findings were that 57.1% of the students were single, 41.8% married, and 1.0% divorced; that 76 students did not have additional handicaps; and that some of the older students depended upon wages and spouse as a source of income, while significantly more of the younger students were dependent on their parents. Frequent comments by students emphasized such things as the inadequacies in curriculum offerings; the desire for more opportunity to interact socially and academically with sighted persons; the desire for less emphasis on music, particularly for those lacking talent in this area; and the desire for more vocational counseling and training with respect to job opportunities and strategies of job seeking.



Cook, J., Rovssel, A., & Skiba, P. (1987). <u>Transition</u>
into employment: Correlates of vocational achievement
among severely mentally ill youth. Chicago, IL:
Thresholds.

HANDICAPPING CONDITION: MR_SP

PRIMARY FOCUS: EMPLOYMENT OUTCOME
The dependent employment variables include: occurrence of
paid agency employment, and number of days between
program entry and start of first placement. Independent
variables include work history, self-esteem, and
stigma ization, among others.

ABSTRACT :

This paper presents data from a transition program designed to rehabilitate young adults with severe mental illness, by using occurrence of paid agency employment and time interval preceding first job placement in a large, psychological rehabilitation center as dependent variables in a correlational study. Results showed that prior work history had a negative correlation with time spent preceding job placement. Numerous explanations are offered for this result: how self-esteem, high sense of stigmatization and a higher number of a social leisure time activities were associated with a longer time elapsed before work was begun. It was also found that female subjects obtained employment sooner than male subjects, and older subjects obtained work sooner than younger subjects.

REC # :

of the North Kansas City Public Schools work study
graduates 1966-1980. Paper presented at the annual
international convention of the Council for Exceptional
Children, Philadelphia, PA.

HANDICAPPING CONDITION: MR_MI

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment outcomes include: job retention, types of jobs, employment rates, income, job satisfaction.

ABSTRACT:

This excerpt contains a brief overview of the work/study program for students identified as mildly mentally retarded at the North Kansas City Public Schools. A summary of the data collected on 62 males and 38 females who graduated from the work/study program is included as well as charts containing data on independent living and employment variables.

Cordoni, B. K. (1982). Post-secondary education: Where do we go from here? <u>Journal of Learning Disabilities</u>, 15, 265-266.

HANDICAPPING CONDITION:

PRIMARY FOCUS: EDUCATIONAL OUTCOME
Proposed articles detailing information about existing
college programs in future <u>Journal of Learning</u>
<u>Disabilities</u>.

ABSTRACT :

Journal of Learning Disabilities proposes to solve the major problem, lack of support systems, of college bound students with learning disabilities by providing: 1) a listing of colleges and universities that offer LD-related services in the November 1982 issue, and 2) subsequent articles containing information about college programs that include specialized testing, access to taped books, components of the program and entrance requirements. Federal legislation established guidelines and rights for the population with LD to receive an appropriate e' cation but few move on to institutions of h sher learning because of entrance criteria. Colleges that do provide services suffer under the cost involved and the lack of research data to quide and direct.

Services are expensive and thus preventative. Personnel to supervise, develop programs and integrate services and tutoring are difficult to fund. The author indicates what is lacking to improve existing services is a clearer understanding of learning disabilities. The consciousness-raising activities will begin to improve and broaden instructional methodology with students who have LD.

REC #:



Crain, E. J. (1985). Socioeconomic status of educable mentally retarded graduates of special education.

<u>Education and Training of the Mentally Retarded</u>, 15, 90-94.

HANDICAPPING CONDITION: MR_MI

PRIMARY FOCUS

ABSTRACT :

The economic status of 130 graduates from EMR programs of Special School District, St. Louis County, Missouri was investigated. The graduates were randomly selected from the classes of 1962, 1965, 1968, 1971, 1974, and 1977. Current occupational data were collected and recorded from occupational records. Personal telephone interviews with each of the 130 individuals were conducted. Results showed that 68% of the individuals were in the civilian labor force. individuals in the labor force, only 7.9% were unemployed, and the majority were earning an income at poverty level. Sixty-three percent held unskilled and semi-skilled jobs. Of the variables age, sex, race, IQ, and vocational training, age was the only variable found to be related to wage, i.e., the older the individual, the higher the Comparisons were made between EMR graduates and poverty levels as defined by U.S. Department of Labor, between unemployment rate of EMR graduates and the population of St. Louis County.

Curtis, W. S., & Donlon, E. T. (1984). A ten-year follow-up study of deaf-blind children. Exceptional Children, 50, 449-455.

HANDICAPPING CONDITION: BLIND

PRIMARY FOCUS: EDUCATIONAL OUTCOME Educational variables studied include: supplemental programs, vocational preparation, type of educational programming, summer educational programs.

ABSTRACT:

In the early 1970's, 49 children identified as deaf-blind were evaluated for educational adjustment and communication level through a structured observational procedure. Ten years later, the examiners have used the national registry for the deaf-blind to relocate these children. A comparison of the children's general level of functioning then and now is reported in those instances where the two reporting tools are compatible.

Dalton, R. F., & Latz, A. (1978). Vocational placement:

The Pennsylvania Rehabilitation Center. Rehabilitation Literature, 39, 336-339.

HANDICAPPING CONDITION: ORTHO SED MR_SP MR_MO MR MI

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment variables include: employment outcome
statistics.

ABSTRACT :

The authors discuss the need for developing management information systems to organize the client data generated by comprehensive rehabilitation centers in order to permit outcome research. Reviews of current rehabilitation literature indicate that more attention is paid to technique and prediction studies than to studies of how comprehensive rehabilitation services affect clients. One way that rehabilitation centers can organize their data is to establish baseline statistics. This paper outlines the results of one such program conducted at the Pennsylvania Rehabilitation Center. Their baseline statistics (established for 1,395 clients discharged during 1973, 1974, and 1975) cover the following areas:

- l. the number of clients __aced in competitive employment (75%)
- 2. the most frequently served disabilities placed in employment
- 3. the relationship between severity of disability and placement (no significant relationship found)
 - 4. training-related job placement (42%)
- 5. rate of completion of training program (63%)

They conclude that the results of this study correspond closely with results obtained by other investigators. The study design does not permit cause and effect conclusions, but the authors believe the experience has provided insight into the kinds of data needed to conduct outcome studies in the areas of vocational training, vocational evaluation, and physical restoration.

DeJung, J. E., & Reed, D. M. (1978). Measurement of community

adjustment of mildly retarded young adults: Final

reports. Eugene: University of Oregon, College

of Education. (ERIC Document Reproduction Service No.

ED 126 221)

HANDICAPPING CONDITION: MR MI

PRIMARY FOCUS: INDEPENDENT LIVING STATUS
Some of independent living areas studied include:
personal care, managing money, work occupation, values and
goals.

ABSTRACT:

This study sought to examine the occupational and social functioning of young adults with mild retardation in their post-school environment using the Forced Choice Inventory (FCI). The FCI is an interview questionnaire designed to examine employment and social living activities, goals and expectations. Cited among the findings are: approximately one half of the students living at home indicated dissatisfaction with their present living arrangements and nearly all said that they wanted to be on their own; the unemployment rate for the students' parents was about double of that for the general population; a problem cited by respondents as relating to employment was transportation, and the ability and independence in getting around; and data supported the appropriateness of the FCI format and content for administration to populations with mild retardation.

REC #:

.3 %

156

Annotated Bibliography

Edgar, E. (1985). How do special education students fare after they leave school? Response to Hasazi, Gordon, & Roe. Exceptional Children, 51, 470-473.

HANDICAPPING CONDITION:

PRIMARY FOCUS

ABSTRACT :

This article is a response to Hasazi, Gordon and Roe's study concerning the post-school service needs of students with handicaps - the Vermont study. Edgar applauds the efforts and offers more issues to be addressed such as place of residence, marital status, legal infractions, life satisfaction, etc., and raises questions about some of their methods and findings. The article emphasizes that other states need to follow Vermont's lead so that efforts can be evaluated, programs can be defined, and the effectiveness of the human services system can be monitored.

REC # :



Edgar, E. (1987). Secondary programs in special education:

Are many of them justifiable? Exceptional Children, 53(6), 555-561.

HANDICAPPING CONDITION: BLIND MR MI LD

PRIMARY FOCUS: EDUCATIONAL OUTCOME
This article discusses the apparent link between secondary special education programs for students with mild handicaps and the eventual post-high-school adjustment of these students.

ABSTRACT :

This article discusses the apparent link between secondary special education programs for students with mild handicaps and the eventual post-high-school adjustment of these students. The current national emphasis on transition to the community, and especially to work, has resulted in the close scrutiny of the outcomes of special education. Large numbers of students with mild handicaps are dropping out of school programs and both graduates and dropouts earn very low salaries. The author suggests a radical change in secondary programs for students with mild handicaps, away from academics and toward functional, vocational programs.

Edgar, E., Levine, P., & Maddox, M. (1985). Washington

State follow-up data of postsecondary special education

students. Seattle: University of Washington,

Networking and Evaluation Team, Experimental Ed. Unit

WJ-10.

HANDICAPPING CONDITION:
BLIND MULTI VISU HI ORTHO DEAF SED MR_SP MR_MO MR_MILD

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment variables include: current employment status,
type of jobs, number of hours employed, income, how
obtained first post school job, parent satisfaction with
child's current employment.

ABSTRACT:

The Five-Year Follow-up Study is a cross sectional study of students who have graduated from or left special education. Used a one-timeonly parent telephone interview supplemented by Three-Year Follow-Along Study is a school records. longitudinal study of all students who have graduated with the most recent class. Parents are contacted by phone on a six-month schedule for three years. School record reviews supplement data. The 7th Grade Follow-Along Study consists of collecting ongoing information on the school status on an entire group of special education students currently in the 7th grade. A student list of 7th graders is compared to the 8th grade list the following September. A parent telephone interview is conducted for any student who is unaccounted for on the second list. This process continues through the 12th grade.

All three studies provide a data base for examining the outcomes of Special Education in order to evaluate program effectiveness, facilitate curriculum modification, and develop procedures for transition from school to employment. Documentation illustrates progress in employment, independent living, and postschool adjustment.

Elliot, R. E., Rock, D. A., and Kaplan, B. A. (1985).

The psychometric characteristics of the SAT for 9

handicapped groups (Report No 3). Princeton, NJ: College
Entrance Examination Board (CEEB), Educational Testing

Se Ce (ETS), & Graduate Record Examination (GRE).

HANDICAPPING CONDITION: MULTI VISU ORTHO DEAF LD

PRIMARY FOCUS: EDUCATIONAL OUTCOME
Educational variables include: SAT total, verbal, and
performance scores.

ABSTRACT :

This study examined the psychometric characteristics of the Scholastic Aptitude Test (SAT) administered under special conditions for nine groups with handicaps. Four psychometric characteristics were studied: level of test performance, test reliability, speededness and extent of unexpected differential time performance. Results of the study showed that students with visual impairments and those with physical handicaps achieved mean scores generally comparable to students taking the SAT in national administrations. Students with hearing and visual impairments scored lower than their nondisabled peers. Differences between verbal and mathematical performance were generally comparable to those for the nondisabled reference group.

REC # :

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Fafard, M., & Haubrich, P. A. (1981). Vocational and social adjustment of learning disabled young adults:

A follow-up study. Learning Disability Quarterly,
4, 122-130.

HANDICAPPING CONDITION:

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment cutcomes studied include: vocational
adjustment, part-time or full-time, type of job.

ABSTRACT:

Twenty-one young adults who had received educational services for learning disabilities as young children were interviewed in regard to their adjustment as adults. An interview technique was used to obtain: (1) demographic information, (2) school adjustment information, (3) vocational adjustment information, and (4) social adjustment information. Analysis of the results indicated that the majority of subjects 1) had required additional supportive educational service throughout their schooling; 2) needed vocational assistance; and 3) were often dependent on family support for social activities. The findings are discussed in terms of future investigation with adolescents with learning disabilities.

Fardig, D. B., Algozzine R. F., Schwartz, S. E., Hensel,

J: W., & Westling, D. L. (1985). Postsecondary vocational adjustment of rural mildly handicapped students.

Exceptional Children, 52, 115-121.

HANDICAPPING CONDITION : SED MR MO LD

PRIMÁRY FOCUS: EMPLOYMENT OUTCOME Employment outcome variables stúdied include: current status, overall employment history since high school.

ABSTRACT:

Few studies have focused on the postsecondary adjustment of students with mild handicaps living in rural areas. This article examines a study of the background of 113 students formerly labeled mildly handicapped to determine what educational variables were predictive of their current occupational status. Data were collected on the demographic and academic backgrounds of the students as well as on current and previous employment status. These variables were reviewed and statistical measures were used to describe and evaluate the relationship between the former students' employment status and their education and training. Analysis of the results indicated that former students were employed an average of 50% of the time after termination of their secondary education and that former special education students received little specific vocational training. Correlational analyses reflected a positive relationship between years of school completed and employment status. Additionally, a significant relationship between certain academic variables (e.g., mathematics level and reading level) and employment status was indicated. Results are discussed relative to implications or improved training of students served in classes for the mildly handicapped.

Faretra, G. (1981). A profile of aggression from adolescence to adulthood: An 18-year follow-up of psychiatrically disturbed and violent adolescents.

American Journal of Ortho-Psychiatry, 51(3), 439-453.

HANDICAPPING CONDITION · SED

PRIMARY FOCUS: INDEPENDENT LIVING STATUS
Independent living information was collected about
reinstitutionalization and correctional contacts, length
of hospitalization, criminal activity.

ABSTRACT :

An 18-year follow-up of 66 adolescents who were aggressive, disturbed and who were admitted to the children's unit of a large mental hospital in 1960 revealed a high degree of antisocial and criminal behavior persisting into adulthood, with lessening psychiatric involvement as the subjects matured. Factors contributing to this pattern of continuing antisocial behavior are identified, and implications for treatment are considered.

REC # :



Fisher, A. T., & Harnisch, D. L. (1987). <u>Career aspiration</u>

<u>models of adolescents and young adults: A comparison</u>

<u>of handicapped and nonhandicapped students</u>. Paper

presented at the American Educational Research Association

Annual Conference, Washington, DC.

HANDICAPPING CONDITION: HI ORTHO DEAF SI LD

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment outcomes studied include: career aspiration at age 30, perceptions of individuals with handicaps about others' career expectations of him/her, and socioeconomic status.

ABSTRACT:

This paper presents a number of models that compare career aspirations of youth with handicaps and those without handicaps. The data were obtained from the <u>High School and Beyond</u> national survey. The purpose of this paper was to address the issue of the exclusion of students and graduates with handicaps from higher status (and paying) occupations. The paper concludes that the sample with handicaps reported lower career aspirations than the sample without handicaps, and were seemingly being supported in their lowered aspirations by the significant others around them.



Ford, L., Dineen, J., & Hall, J. (1984). Is there life after placement? Education and Training of the Mentally Retarded, 19, 291-296.

HANDICAPPING CONDITION: MR_SP MR_MO MR_MI

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment variables studied include: competitive
employment, feedback and reinforcement on the job,
long-term supervision, maintaining vocational skills.

ABSTRACT :

Long-term job maintenance problems among the graduates of a vocational placement program over a six-year period were examined. Most problems fell into three categories: (a) decline in vocational performance due to the scarcity of performance feedback; (b) deficits in social and/or life skills which interfered with the job; and (c) emergence of job-threatening problems long after typical agency intervention had been completed. The findings suggest a need to provide follow-up services over an extended period of time in order to maintain employment. The costs of providing such services are reported.

Foss, G., & Perterson, S. L. (1981). Social-interpersonal skills relevant to job tenure for mentally retarded adults. Mental Retardation, 19(3), 103-106.

HANDICAPPING CONDITION: MR_SP MR MO MR MI

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment outcomes studied include: work
maladjustments of adolescents with mental retardation,
and job skills.

ABSTRACT :

Social-interpersonal behavior areas most relevant to job tenure for adults with mental retardation are identified. Respondents to a questionnaire designed to identify these behavior areas are 64 job placement personnel in sheltered workshops in 11 western states. A high level of agreement among the respondents is noted. Three of the four areas identified as most relevant to job tenure for adults with mental retardation are concerned directly with the supervisor-worker relationship.

Frauenheim, J. G. (1978). Academic achievement characteristics of adult males who were diagnosed as dyslexic in childhood. <u>Journal of Learning Disabilities</u>, <u>11</u>, 476-483.

HANDICAPPING CONDITION:

"RIMARY FOCUS: EDUCATIONAL OUTCOME Educational variables studied include: skill attainment in reading, spelling, arithmetic.

ABSTRACT:

This article reports the skill attainment in reading, spelling, and arithmetic for a group of 40 adult males who were diagnosed as dyslexic in childhood. The results of the follow-up assessment indicate that severe residual learning problems are present despite the fact that much special education attention was provided during school-age years. Test performance and reports from subjects further demonstrate that current learning difficulties are essentially identical to those evidenced at the time of diagnosis.

REC #:



Gaule, K., Nietupski, J., & Certo, N. (1985). Teaching supermarket shopping skills using an adaptive shopping list. Education and Training of the Mentally Retarded, 20(1), 53-59.

HANDICAPPING CONDITION: MR_SP MR_MO

PRIMARY FOCUS: INDEPENDENT LIVING STATUS
The following purchasing skill clusters were examined
in the study: preparing a shopping list, locating
and obtaining items from the supermarket, and purchasing
obtained items.

ABSTRACT :

Three young adults with moderate/severe disabilities were taught to use an adaptive shopping aid in order to (a) prepare a grocery shopping list, (b) locate and obtain items in a supermarket, and (c) purchase those items. A multiple probe design was used to validate the instructional package consisting of total cycle training on the steps involved in the shopping task, social praise for correct responses and a least-to-most prompt correction procedure for task step errors. Data indicated skill acquisition by all three young adults, with partial skill maintenance as much as four weeks following problem completion.

RECORD # 136



Gaylord-Ross, R. (1987). <u>Vocational integration for persons with mental handicaps: A cross-cultural perspective</u>. San Francisco, CA: San Francisco State University, Department of Special Education.

HANDICAPPING CONDITION: MR_SP MR_MO MR_MI

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment variables include: societal values, political
will, charismatic leaders, model demonstration programs,
instructional technology and economic state.

ABSTRACT :

This research describes patterns of vocational integration for persons with mental handicaps in Italy, Germany, Switzerland, Great Britain, and Denmark. It was found that nonsheltered employment for persons with mental handicaps is likely to continue and expand in countries which have effective placement and training programs. Although the initial impetus for such programs may emerge from political movement with charismatic leaders and demonstration sites, the durability of such programs will depend upon their institutionalization in policy regulation. Such legislation may include economic incentives for employers, quotas or affirmative action policies, and statutory funding for employment agencies.

REC #:



Gill, H. (1984). An employment related follow-up of former special education students in Pierce County,

Washington. Tacoma, WA: Vocational/Special Education Cooperative. (ERIC Document Reproduction Service No. ED 250 854)

HANDICAPPING CONDITION: MULTI ORTHO DEAF SED MR_MI LD

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment variables studied include: type of job,
previous employment, wages, unemployment rate given for
nonhandicapped.

ABSTRACT:

The booklet reports on a study of 194 former students of special education programs in Pierce County, Washington, who had left school during 1981-84. Questionnaires were .ompleted by parents or guardians to collect eight items of information: (1) the student's handicapping condition while in school, (2) current employment status and job title, (3) current monthly salary range, (4) previous employment status during the past 3 years, (5) previous monthly salary range, (6) current involvement in postsecondary education programs, (7) type of postsecondary program (academic or vocational), and (8) name and location of program. Among conclusions drawn were that learners with handicaps have about a 50/50 chance of being employed upon graduating or leaving secondary schools in this county; that 28% of the sample gross less than \$4,800 annually, and that an additional 40% will earn an average wage of \$7,200 per year; that 23% of the former students do not work at the present time and have not worked for the past 3 years; and that over 80% reported no involvement with postsecondary education.

REC #:

x * * \$ x *



Gollman, A. E., Simon, E. P., & Shinn, E. B. (1978). An outcome study of an intensive rehabilitation training program for young adults. <u>Visual Impairment and Blindness</u>, 72, 388-392.

HANDICAPPING CONDITION: MULTI VISU

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment variables include: income, numbers employed
and unemployed, work evaluation, competitive or sheltered
workplace.

ABSTRACT:

This article describes an evaluation of an intensive training program for adults with multiple handicaps who could not use other rehabilitation programs. Among findings from data collected at entry, exit, and follow-up, are that almost all clients expressed satisfaction with the program and most retained independent living, mobility, and employment skills for years after exit.



Gottesman, R. L. (1979). Follow-up of learning disabled children. Learning Pisability Quarterly, 2(1), 60-69.

HANDICAPPING CONDITION:

PRIMARY FOCUS: EDUCATIONAL OUTCOME Educational variables include: longitudinal data (5-7 yrs), reading achievement of children with learning problems.

ABSTRACT:

Limited longitudinal data on learner characteristics and performance are available in the learning disability field. This study, however, follows the course of reading achievement over a five- to seven-year period of a group of children with learning problems. These students' characteristics are described in detail along with their relationship to reading achievement over time. The data support the premise that academically related deficits persist over time in populations with learning disabilities.

REC # :



Goyette, C. H., & Nardini, J. C. (1985). The learning disabled: A longitudinal study of the transition from school to work. Rehabilitation World, 9, 27-28.

HANDICAPPING CONDITION:

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Research questions on employment patterns are addressed.

ABSTRACT:

The article describes a 3-year longitudinal study to examine postsecondary vocational pursuits of high school seniors with learning disabilities. Seven major research questions for the study are posed, including employment patterns, job-seeking techniques, and effects on transition of school performance, socio-economic status, self-concept, and intellectual ability.

REC # :



Gregory, J. F., Shanahan, T., & Walkerg, H. J. (in press).

A descriptive analysis of high school seniors with

speech disabilities. <u>Journal of Communication Disorders</u>.

HANDICAPPING CONDITION:

PRIMARY FOCUS: EDUCATIONAL OUTCOME
Academic achievement variables include: mathematics,
vocabulary, reading, and pattern recognition. Rating of
school: discipline, facilities, quality, and relationship
to school.

ABSTRACT:

Of over 26,000 high school seniors for whom survey data from the recent High School and Beyond study were complete, 278 identified themselves as having speech disabilities. The data on these latter students were compared to those of their peers without impairments vis-a-vis demographic variables and measures of achievement, personal characteristics, and relationship to school and These students with oral handicaps tended to be older, to be more often from linguistic minority groups, and to report more additional handicapping conditions. The data also showed the impaired group at a disadvantage regarding achievement, self-image, motivation, and aspirations. Some areas for possible amelioration are suggested.

REC # :

Gregory, J. F., Shanahan, T., & Walberg, H. (1986).

A profile of learning disabled twelfth graders in regular classes. <u>Learning Disability Quarterly</u>, 9(1), 33-42.

HANDICAPPING CONDITION: MULTI LD

PRIMARY FOCUS: EDUCATIONAL OUTCOME
Academic achievement variables include: math, reading,
vocabulary; ratings of school, quality of instruction,
homework, discipline problems, academic courses completed,
extracurricular activities.

ABSTRACT :

Of the 26,147 twelfth-graders on whom survey data from the national High School and Beyond study were complete, 439 (1.7%) identified themselves as having specific learning disabilities. Comparisons between the data on these students and those on their nonimpaired peers showed that the group with learning disabilities (a) was older, (b) included a disproportionately high number of minority members, and (c) reported significantly more other handicapping conditions. Likewise, the students with learning disabilities scored significantly lower on all measures of academic achievement tested and on most indices of self-esteem and motivation. They also reported more serious trouble with the law. Parity was only uncovered on such variables as amount of television viewing and school-based extracurricular activities. Implications of the findings are discussed.

Gregory, J. F., Shanahan, T., & Walberg, H. (1985).

What were they like in high school? Profile of speech disabled sophomores from a 1980 national study. American Rehabilitation, 11 9-15, 32.

HANDICAPPING CONDITION:

PRIMARY FOCUS: EDUCATIONAL OUTCOME
Academic achievement variables include: mathematics,
science, civics, vocabulary, reading, and writing. School
related factors include: discipline, quality, rating of
school, homework, coursework, grades, and extra curricular
activities.

ABSTRACT :

Of the 30,030 tenth graders on whom survey data from the national High School and Beyond study were complete 489 (1.6%) identified themselves as having a speech disability. Comparisons between the data on these students and those on their peers without impairments showed that the group with speech disabilities, a) was older, b) included a disproportionate number of minority members, and c) reported other handicapping conditions. Likewise, the students with speech disabilities scored significantly lower on all measures of academic achievement tested and on most indices of self-esteem and motivation. Implications of the findings are discussed.

Gregory, J. F., Shanahan, T., & Walberg, H. J. (1985).

A national survey of mainstreamed hearing impaired high school sophomores. <u>Journal of Rehabilitation</u>, <u>51</u>, 55-58.

HANDICAPPING CONDITION:

PRIMARY FOCUS: EDUCATIONAL OUTCOME
Academic achievement variables include: reading,
vocabulary, writing, mathematics, science, and civics;
indices of motivation include: courses taken, out of
class effort like TV viewing and homework, plans for
future, racial and ethnic distinctions.

ABSTRACT :

Data on 686 high school sophomores with hearing impairments were compared to those on 26,418 of their peers who possessed normal hearing on demographic characteristics, academic achievement, and indices of motivation. The group with auditory impairments tended to be older and to have a higher incidence of students of Hispanic background than did the normal hearing group. In all areas of academic achievement tested (reading, writing, vocabulary, civics, science, and mathematics), the pupils with hearing disabilities fared more poorly than did those with normal hearing. The results of the comparisons of motivation were somewhat mixed. While the subjects who identified themselves as deaf and hard-of-hearing reported taking the same number of general academic and hono: s courses and watching television to the same degree as did their classmates without hearing difficulties, these students with hearing impairments also reported doing less homework and failing to complete homework assignments more often, and they evidenced less ambitious plans for the future.

REC # :



Gregory, J. F., Shahan, T., & Walberg, H. J. (1984).

Mainstreamed hearing-impaired high school seniors:

A re-analysis of a national survey. American Annals of the Deaf, 129, 11-17.

HANDICAPPING CONDITION: DEAF

PRIMARY FOCUS: EDUCATIONAL OUTCOME
Academic achievement variables include: reading
vocabulary and mathematics; also motivation, quality of
academic coursework, and homework.

ABSTRACT:

Of the 26,146 high school seniors surveyed in the recent High School and Beyond study, 514 identified themselves as having hearing problems. The data on these respondents were compared to those on their normally hearing peers regarding demographic characteristics, academic achievement, and motivation. Black students were underrepresented among seniors with hearing impairments who had been mainstreamed. Furthermore, the subgroup made up of hearing-impaired individuals scored lower on indices of academic achievement and motivation than those of the group without hearing impairments. These findings highlight a need for more extensive academic and guidance support services for this population if its potential is to be realized.

Gregory, J. F., Shanahan, T., & Walberg, H. J (1980).

Learning disabled 10th graders in mainstreamed settings:

A descriptive analysis. Remedial and Special Education,
6, 25-33.

HANDICAPPING CONDITION:

PRIMARY FOCUS: EDUCATIONAL OUTCOME
Academic achievement variables include: mathematics,
science, civics, vocabulary, reading and writing; LD group
manifests universal and pronounced academic deficit,
ratings of schools, quality of instruction, discipline.

ABSTRACT:

Of the 30,000 sophomolis for whom survey data from the national High School and Beyond study were complete, 810 (2.7%) identified themselves as having specific learning disabilities. Various comparisons were made between these 10th graders with learning disabilities (LD) and their peers without learning-disabilities (NLD). group with LD was older, had a disproportionately high representation of Blacks and Hispanics and an underrepresentation of whites, and reported more secondary handicapping conditions than did the cohort without LD. In all areas of academic achievement tested, the pupils with learning disabilities showed significant deficits. The adolescents with learning disabilities also had lower incidence of motivation, adjustment, locus of control, independence, self-perception of attractiveness and popularity, and of scholastic orientation of close friends. Futhermore, the individuals who identified themselves as LD evidenced more legal and school-related problems. The two groups, however, acknowledged spending equal amounts of time in out-of-school activities. Speculations regarding the findings are offered.

REC #:



Gresham, F. M. (1982). Misguided mainstreaming: The

case for social skills training with handicapped children.

Exceptional Children, 5, 422-433.

HANDICAPPING CONDITION: SED MR MI LD

PRIMARY FOCUS: EDUCATIONAL OUTCOME
The primary outcome focus is mainstreaming.

ABSTRACT :

This paper asserts that mainstreaming is based in part upon three faulty assumptions: placement of children with handicaps in regular classrooms will result in increased social interaction between children with handicaps and those without; (b) placement of children with handicaps in regular classrooms will result in increased social acceptance of children with handicaps by their peers without handicaps; and (c) mainstreamed students with handicaps will model the behavior of their peers without handicaps because of increased exposure to them. A large body of research is reviewed which refutes these three assumptions. An alternative approach is suggested whereby children would be taught the requisite social skills for effective social interaction and peer acceptance. Social skills curricula for use by both teachers in special education classes and those teaching in regular classes are suggested for accomplishing this goal.

REC #:

Gloss, S. (1984). Follow-up evaluation of Mark Twain

students: Phase III. Rockville, MD: Montgomery County
Public Schools, Department of Educational Accountability.

(ERIC Document Reproduction Service No. ED 256 801)

HANDICAPPING CONDITION: SED

PRIMARY FOCUS: EDUCATIONAL OUTCOME
Educational variables include: academic success in
regular schools after Mark Twain program, decrease of
problems, absenteeism, discipline, level of mainstreaming.

ABSTRACT :

The Mark Twain School in Rockville, Maryland serves students with emotional disabilities in grades 5 through 12 whose severity of emotional problems seriously impairs their successful functioning in regular classes. The Department of Educational Accountability has conducted a study of characteristics of students served in the Mark Twain School and the degree of their academic success in regular school after completing the Mark Twain program. This study was designed to describe the student population at Mark Twain in recent years; monitor the progress of former students who have been returned to regular schools; and determine which variables best predict 'he eventual success of these students. This report describes the current instrumentation used in the study. Detailed findings of this study are presented graphically. The predictor variables of success determined by the study were discussed. A five-page executive summary is included.

REC #:



Hall, P. K., & Tomblin, J. B. (1978). A follow-up study of children with articulation and language disorders.

Journal of Speech and Hearing Disorders, 43, 227-241.

HANDICAPPING CONDITION: SI LD

PRIMARY FOCUS: EDUCATIONAL OUTCOME
This study focuses on communication skills and educational
performance.

ABSTRACT :

Thirty-six children were selected as subjects. 18 children with language-impairments and 18 children with articulation impairments, were followed up with respect to communication skills and educational performance 13 to 20 years after their initial contact with the Speech and Hearing Clinic. According to their parents, nine children with language impairments continued to exhibit communication problems as adults, compared to only one of the children with articulation impairments. Standardized educational testing conducted while the subjects were in elementary and secondary schools indicated that the group with language impairments consistently achieved at a lower level than the group with articulation impairments, particularly in reading. Differences between the groups were also exhibited in the types of postsecondary education attempted by the subjects. Clinical, educational, and research implications of these results are discussed.



Halpern, A. S. (1978). The impact of work/study programs on employment of the mentally retarded: Some findings from two sources. <u>International Journal of Rehabilitation</u>
Research, 1, 167-175.

HANDICAPPING CONDITION: MR MI

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment variables include: employment status
and unemployment rates.

ABSTRACT :

The employment success and employment levels of both graduates and early terminators from high school work/study programs for young adults identified as educable mentally handicapped (16 to 21 years old) were examined. Data sources included the vocational placement results of students in work/study programs in 14 Oregon school districts and 43 federally funded work/study programs. It was found that persons with mental handicaps who finished their work/study programs had substantially higher employment levels than did similar persons not completing or only partially served by their programs.

Hart, J. L., Moilanen, M. S., & Bensmad, A. S. (1383).

Transitional rehabilitation: Another step toward

community living. Rehabilitation Literature, 44(5-6),

149-112.

HANDICAPPING CONDITION: MULTI HI ORTHO

FRIMARY FOCUS: INDEPENDENT LIVING STATUS
Independent living variables include: work history,
educational levels, self-care skills, leisure interests
and activities.

ABSTRACT :

Community living centers as a means of transition from more restrictive environments to independence and autonomy are discussed. Focus is on programs to develop self-dependence in the clients so that they may have control over their own lives, and their decision-making and choices. This empowerment method requires the rejection of the redical model of expert and those to be treated.

Results of follow-up surveys of previous residents showed that they adapted well to community living on measures of work history, educational levels, self-care skills, self-administration of drug, driving, and leisure interests and activities.



Hasazi, S. B., Gordon, L. R., Roe, C. A., Hull, M.,

Finck, K., & Salembier, G. (1985). A statewide follow-up

on post high school employment and residential status

of students labeled "Mentally Retarded." Education

and Training of the Mentally Retarded, 20, 222-234.

HANDICAPPING CONDITION: MR SP MR MO

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment variables include: current employment, job
characteristics, relationship of location of school
attended, gender, and high school program to current
employment status, means of finding employment, wages,
types of jobs.

ABSTRACT:

This study investigated the employment and residential status of 243 youths with mental retardation who had exited high school in Vermont between 1981 and 1983. Information was solicited from school records and through telephone interviews and included vocational training history, employment history, social service utilization, and residential and marital status. The results indicated that certain vocational and educational experiences during high school were related to employment status and salary level following high school, that employment rates remained stable across rural, urban, and metropolitan areas, and that the majority of employed youths found their jobs through their self-family-friend network. The findings were compared with those of an earlier study of a cross-categorical sample of youths with handicaps.

REC #;

193

Hasazi, S. B., Gordon, L. R., & Roe, C. A. (1985).

Factors associated with employment status of handicapped youth exiting high school from 1979-1983. Exceptional Children, 51, 455-469.

HANDICAPPING CONDITION: DIS SED MR_MI LD

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment variables include: employment status, wages, %
of time employed sinca high school, type of jobs.

ABSTRACT :

Factors associated with the employment status of youth with handicaps were investigated in a sample of 462 youths from nine Vermont school districts. All students from these districts who exited high school between 1979 and 1983, and who had been receiving special education services, were identified. Interviews were conducted with 301 youths to solicit current employment status, employment and training history, and use of social services. Additional information regarding educational history, age, and community demographics was obtained through individual student records. Employment outcomes were related to secondary vocational and training experiences, controlling for geographic location, gender, and level of functioning. Results indicated that over half the sample were employed; that most of the youths found jobs through the self-family-friend network; that part-time or summer work during high school were predictors of percentage of time employed since high school and current wages. These findings were discussed in terms of their implications for researchers, service providers, and policy makers.

REC #:

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Hawkins, J. A. (1984). <u>Follow-up study of special education</u>

<u>graduates: Class of 1983</u>. Rockville, MD: Department of

Educational Accountability. (ERIC Document Reproduction

Service No. ED 256 786)

HANDICAPPING CONDITION:
MULTI ORTHO DEAF SED MR SP MR MO LD

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment variables include: number employed and
unemployed; part-time, full-time, types of jobs, employers
attitudes.

ABSTRACT :

The Montgomery County Public Schools (MCPS), Maryland, annually survey graduating classes to help determine whether MCPS adequately prepare their graduates. This is the first follow-up study of MCPS's 10 special education schools' graduates (class of 1983). It investigates: postsecondary education and employment activities; 2) students' and/or parents' perceptions of program (mality; 3) the effectiveness of these programs; and 4) current living arrangements for graduates. Telephone surveys were conducted with 92 (of 179) MCPS graduates, 48 parents, and 36 employers. Findings show that most graduates are either working in relatively low-skilled job categories or attending training institutions. However, both parents and graduates at some schools felt MCPS could improve its job training programs. Employers are satisfied with the work of the graduates and rate their job performance very highly. The Appendix contains descriptions of the MCPS special education programs for mental retardation (Concord, Longview, and Stephen Knolls Schools), multiple handicaps (Rock Terrance High School), emotional impairment (the regional Institute for Children and Adolescents in Rockville, Bridge School, and Mark Twain School), hearing impaired (Rockville High School), orthopedically and other health impaired (Kennedy High School), and specific learning disability (Walter Johnson, Gaithersburg, and Kennedy High Schools).

REC # :



Heal, L. W., & Chadsey-Rusch, J. (1985). The Lifestyle Satisfaction Scale (LSS): Assessing individual's satisfaction with residence, community setting, and associated services. Applied Research in Mental Retardation, 6, 475-490.

HANDICAPPING CONDITION: MR_SP MR_MO MR_MI

PRIMARY FOCUS: INDEPENDENT LIVING STATUS
This study's focus is on the psychometric properties
of the LSS. The LSS measured individuals' satisfaction
with their residence, community setting, and associated
services.

ABSTRACT:

Satisfaction of persons with mental retardation with their quality of life is an important outcome measure of deinstitutionalization. The Lifestyle Satisfaction Scale (LSS) was developed to assess satisfaction with their residence, its community setting, and associated services. An acquiesence subscale makes it possible to correct satisfaction scores for acquiesence bias. Empirical data indicate that this experimental version of the LSS has internally consistent subscales and good test-retest and inter-rater reliabilities.



Hiebert, B., Wong, B., & Hunter, M. (1982). Affective influences on learning disabled adolescents. <u>Learning Disability Quarterly</u>, <u>5</u>(4), 334-343.

HANDICAPPING CONDITION:

PRIMARY FOCUS: EDUCATIONAL OUTCOME.
Educational variables include: academic self-concept,
student, teacher and parent academic expectations, teacher
perception and parental stress levels of learning disabled
and normal students.

ABSTRACT :

This study investigated: (a) differences between students with disabilities and normally achieving adolescents regarding academic, self-concept and academic expectations; (b) teacher perception of and academic expectations for adolescents with and without learning disabilities; (c) parent academic expectations for adolescents with disabilities and normally achieving individuals; and (d) parental stress. Results indicated that adolescents with learning disabilities had substantially lower academic self-concepts and academic expectations than normally achieving adolescents. Similarly, teachers had negative perceptions of and low academic expectations for students with learning disabilities. Finally, parents of adolescents with learning disabilities had lower academic expectations for their children than did parents of normally achieving adolescents for theirs. Reported stress levels, however, did not differentiate between parents of adolescents with disabilities and normally achieving adolescents. The research and the practical implications of the results are discussed.



Hill, J. W., Hill, M., Wehman, P., Banks, D. P., Pendleton, P., & Britt, C. (1985). Demographic analyses related to successful job retention for competitively employed persons who are mentally retarded. In P. Wehman & J. Hill (Eds.), Competitive employment for persons with mental retardation: From research to practice (pp. 65-93). Richmond, VA: Virginia Commonwealth University.

HANDICAPPING CONDITION: MULTI MR_SP MR_MO MR_MI SI

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment variables include: job retention rates, work
histories, income, under-representation of handicapped
females in the labor market.

ABSTRACT:

Detailed client demographics are given from a longitudinal examination of a special job placement program (the supported work model) for persons with mental retardation over a six-year study period. This investigation also examines the demographic differences in individuals who are maintained in competitive employment over six months versus those individuals who did not achieve a six-month work history. analysis showed significant differences in cver-six months and under-six months retention rates in the following variables: reading skill development (higher retention rates found for persons with more limited reading); differences in types of previous adult programs attended (higher rates for persons from community work crew-oriented programs); differences in guardian identities (higher rates for those who did not have a natural parent listed as a primary guardian); and sex differences which approached significant levals (higher retention rates for males). The implications of the funding on the improvement of vocational rehabilitation efforts are discussed.

REC #:

Hill, M., Hill, J. W., Wehman, P., & Banks, P. D.

(1985). An analysis of monetary and nonmonetary outcomes associated with competitive employment of mentally retarded persons. In P. Wehman & J. Hill (Eds.), Competitive employment for persons with mental retardation: From research to practice (pp. 110-133). Richmond, VA: Virginia Commonwealth University.

HANDICAPPING CONDITION: MR_SP MR_MO MR MI

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment variables include: job retention, income,
fringe benefits, taxes paid.

ABSTRACT:

Monetary and nonmonetary outcomes in a systems approach to program evaluation of the supported work model of competitive employment for persons with disabilities are given. Three replicable levels of program evaluation are presented: at the systems level (benefit cost analysis), at the service delivery level (a Program Efficiency Index), and at the participant level (time employed first year in labor market). Group outcomes on each level of evaluation are given from the longitudinal data of a six-year transitional and supported employment program in the State of Virginia.



Hippolitys, P. (1985). College freshman with disabilities

preparing for employment. Washington, DC: Committee

on Youth Development of the President's Committee

on Employment of the Handicapped and the Higher Education
and the Handicapped Resource Center of the American

Council on Education.

HANDICAPPING CONDITION: VISU HI ORTHO DEAF SI LD

PRIMARY FOCUS: EDUCATIONAL OUTCOME Educational outcomes are average grade in high school, H.S. class standing, self-concept, types of college funding, academic aspirations, proposed major, and career aspirations.

ABSTRACT:

This report describes the educational outcomes and plans of first time, full-time college freshmen with disabilities. The report, one of two on national data on postsecondary students with disabilities obtains its data from the freshman college survey (sample size=300,000) conducted by the Cooperative Institutional Research Program at UCLA. In the last decade, colleges and university have had a three-fold increase in the number of students with disabilities. In 1978, the first time data such as this was gathered, 2.6% of college freshmen indicated they had a disability. In 1985, 7.4% reported they had a disability. The report shows freshmen with disabilities have lower grades in high school, are somewhat older, and consider themselves less prepared for college than their peers without disabilities. The data suggest better precollege programs and support services are needed, and that more research is needed on retention, graduation, and career preparation.

Horn, W. F., O'Donnell, J. P., & Vitulano, L. A. (1983).

Long-term follow-up studies of learning-disabled persons.

Journal of Learning Disabilities, 16, 542-555.

HANDICAPPING CONDITION:

PRIMARY FOCUS: EDUCATIONAL OUTCOME Education outcomes include educational and vocational status.

ABSTRACT:

From several different perspectives, the question of long-term outcomes for children with learning disabilities is an important one. Answers to scientific questions about the nature and developmental course of learning disabilities, as well as the resolution of policy issues concerning the allocation of resources for intervention, may depend on results from follow-up studies of persons with learning-disabilities. Unfortunately, different follow-up studies have produced a variety of conflicting results. Through a careful analysis of the methodologies employed in existing studies, this study not only shows why the research has produced inconsistent results, but also shows how some of these inconsistencies can be resolved. final contribution of this article is to point out the need for specific methodologies on future follow-up research with children with learning disabilities.



Human Services Research Institute (1985). Summarv

of data on handicapped children and youth. Washington,

DC: U.S. Government Printing Office.

HANDICAPPING CONDITION:
BLIND MULTI VISU HI ORTHO DEAF SED MR_SP MR_MO MR_MI
SI LD

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment outcomes surveyed were: employment status
of primary family caretaker and level of annual family
income.

ABSTRACT:

The purpose of this report is to present very comprehensive data on the incidence and prevalence of children with disabilities, their characteristics, and the characteristics of their caretakers. The data cover children living in U.S. households, institutions and other group quarters during the period 1979-1983. In addition, a large portion of the report is devoted to data on children with disabilities in education programs. For example, the report found 78.2% of the students with learning disabilities and 33.2% with speech impairments were served in regular classrooms, but only 29% of the children with mental retardation attended regular classrooms. The data are presented in 64 tables and were obtained from 23 different surveys and censuses. The report contains descriptions of the studies.

REC #:

Jones, M. L., Petty, C. R., Boles, C., & Mathews, R.

M. (1985). <u>Independent living: A survey of program and service needs</u>. Lawrence, KS: The Research and Training Center on Independent Living.

HANDICAPPING CONDITION: MULTI VISU HI ORTHO DEAF

PRIMARY FOCUS: INDEPENDENT LIVING STATUS
Independent living variables include: services provided, satisfaction with independent living centers.

APSTRACT :

Little current information is available on independent living centers (ILCs) and their needs. This study used a mail survey to collect demographic information about independent living programs and to analyze existing service and organizational needs. Survey results were analyzed separately for federally funded centers (Title VII, part B of P.L. 95-602) and other ILCs. Survey results suggest a number of similarities and differences between Title VII-funded ILCs and other ILCs. Program demographics, current organizational needs, and current service needs are discussed.

Keilitz, I., Zaremba, B. A., & Broder, P. K. (1979).

The link between learning disabilities and juvenile

delinquency: Some issues and answers. Learning

Disability Ouarterly, 2, 2-11.

HANDICAPPING CONDITION:

PRIMARY FOCUS: EDUCATIONAL OUTCOME
This study produced preliminary LD prevalence estimates, attempts at resolving definitional issues in learning disabilities and delinquency, and preliminary observations about the link between LD and juvenile delinquency.

ABSTRACT :

The suspected relationship between learning disabilities and juvenile delinquency has gained increased visibility in recent years. This article describes a research effort funded by the Office of Juvenile Justice and Delinquency Prevention to address the hypothesized link between LD and juvenile delinquency. The project has been in operation since 1976 and will continue into 1980. The authors present research results achieved to this point. In addition, an alternative to the "school failure" and "susceptibility" hypothesis concerning the relationship between LD and juvenile delinquency is proposed to accommodate some of the major findings of the research.



Keith, K. D., Schalock, R. L., & Hoffman, K. (1986).

Quality of life: Measurement and programatic

implications. Hastings, NB: Region III & V Mental

Retardation Services.

HANDICAPPING CONDITION: MR SP MR MO MR MI

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment outcomes include: vocational classification, income and others.

ABSTRACT:

This paper is divided into three sections:
(1) a discussion of the concept of quality of life and its measurement, (2) an overview of the development of the QOL questionnaire, and (3) the results and design of four QOL studies.

The first section discusses the importance of this concept, a number of different approaches to operationalizing QOL and several criteria for designing reliable and valid measures. The second section discusses the standardization data obtained from item analysis, inter-item correlations, reliability coefficients, factor analysis and staff-client intercorrelations. The QOL criteria examined were environmental control, social interaction and utilization. High QOL scores were attained by persons in programs that more nearly appropriated community life. Also, the most significant predictor variables were family involvement, income, number of disabilities, and age.

REC #:



Kerachsky S., Thorton, C., Bloomenthal, A., Maynard,
R., & Stephens, S. (1985). <u>Impacts of transitional</u>
<u>employment on mentally retarded young adults: Results of the STETS demonstration</u>. Princeton, NJ: Mathematica
Policy Research.

HANDICAPPING CONDITION: VISU SED MR_MO MR_MI SI LD

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment variables include: average weekly earnings,
percent employed in paid job, occupation type, and hours
worked per week.

ABSTRACT :

This report describes the results obtained from surveying STETS participants 6, 15, and 22 months after random assignment. The Structural Training and Employment Transitional Services (STETS) program is a transitional employment program designed to help young adults with mental retardation become competitively employed. The program moved the participants through three phases: a sheltered workshop setting, a non-sheltered job and an unsubsidized job. The sample consisted of 487 participants divided between the control group and the experimental group.

This report describes the impact the program had on the participants' employment and economic status, life-style, public program transfer dependence, training, and schooling. The researchers concluded the program substantially increased the probability that the participants would hold unsubsidized jobs instead of workshop or activity-centered jobs, but was not effective in assessing overall employment activity among young adults with mental retardation.

Kiernan, W. E., & Bruininks, R. H. (1986). Demographic characteristics. In W. Kiernan & J. A. Stark (Eds.), Pathways to employment for adults with development disabilities (pp. 21-50). Baltimore, MD: Paul H. Brookes.

HANDICAPPING CONDITION:
BLIND MULTI VISU HI ORTHO DEAF SED MR_SP MR_MO MR_MI
LD

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment variables include: 'rate of employment,
employment status, and wages earned.

ABSTRACT :

This chapter begins by comparing the variety of definitions for developmental disabilities and the difficulty in collecting reliable information about this population. Approximately 50 studies of this type are cited and reviewed according to: source, population, method, and results.

The chapter concludes with the presentation of five studies dealing with the presentation status of adults with developmental disabilities. The authors conclude that although some reasonable estimates of the prevalence of the adult with developmental disabilities are possible, employment and unemployment data are extremely limited. However, available information shows that adults with developmental disabilities have an extremely high probability of not being in the labor force or of being under employed.

REC # :



Kiernan, W. E., McGaughey, M. S., & Schalock, R. L. (1986).

National employment survey for adults with developmental disabilities. Boston, MA: The Developmental Evaluation Clinic.

HANDICAPPING CONDITION: BLIND MULTI VISU ORTHO DEAF MR SP MR MO MR MI

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment variables include: number of persons placed,
average age, age range, wages, hours worked per week,
weeks worked, types of occupation, IQ, and SSI payment.

ABSTRACT :

The present study was designed to document changes in the placement patterns of adults with developmental disabilities as the utilization of real work settings increases. Data were collected on three types of employment: transitional training, supported, and competitive. This study documents benefits are realized by the individual and society as a result of creating employment opportunities in integrated work settings. Four hypotheses were substantiated as a result of the study: (1) There is an increase in the placement activities of adults with developmental disabilities. (2) The increase reflects the utilization of transitional training, supported, and competitive employment opportunities. (3) The economic benefits realized through these types of employment are greater than those from sheltered employment, for both the individual and society. (4) The placement being made reflect a variety of occupational categories.

Kim, Y., & Wright, C. E. (1984). A longitudinal study

of vocational education students from California secondary

schools: Project SEE. Sacramento, CA: California

State Department of Education. (ERIC Document Reproduction

Service No. ED 251 672)

HANDICAPPING CONDITION:

PRIMARY FOCUS: EDUCATIONAL OUTCOME Educational variables include: attitudes about vocational preparation, information on post-secondary education.

ABSTRACT :

Project SEE (Student Employment Experiences) was initiated to provide information on the long-term employment experiences of former vocational education students, especially students with special needs, and on the long-range effects of their training. In spring of 1983 a three-year follow-up survey was sent to members of the first annual sample of FUSE (Follow-up of Students and Employers) system participants. Of the 3,529 students in the first annual sample, 1,900 returned the three-year follow-up questionnaire. The three-year follow-up results differed from the one-year results on the variables of unemployment rate and employment in a field related to their high school training. These differences did not necessarily mean the one-year follow-up results were premature, rather, the results seemed to complement each other. Over the two years following the one-year follow-up, the number of students working in a field related to high school training had decreased significantly. significant differences were indicated in salary for students with or without special needs. group with special needs had less favorable employment experiences in terms of rate of employment and number of months employed.

REC # :



King, R. R., Jones, C., & Laskey, E. (1982). In retrospect:

A fifteen-year follow-up report of speech-languagedisordered children. <u>Language</u>, <u>Speech</u>, and <u>Hearing</u>

Services in Schools, 13, 24-32.

HANDICAPPING CONDITION:

PRIMARY FOCUS: EDUCATIONAL OUTCOME
Aspects of educational functioning such as delay of school admission, academic areas of difficulty, tutoring needed and given, grade level (at time of study) and grades received.

ABSTRACT :

A 15-year follow-up of 50 children initially diagnosed as communicatively impaired is reported. The survey describes subjects in terms of the educational levels they have attained, their motor skills, their social skills as perceived by their families, and any communication problems that may exist.

Kirchner, C., & Peterson, R. (1979). Employment:

Selected characteristics. <u>Visual Impairment and</u>
<u>Blindness</u>, 73, 239-242.

HANDICAPPING CONDITION: VISU

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment variables include: employment rates as
compared to population at large, differences by sex,
occupational status.

ABSTRACT:

Employment of individuals identified as blind and low vision was reported in terms of labor force participation, employment status, and occupational status using primarily the 1976 Survey of Income and Education (SIE) and secondarily special tabulations from the National Center for Health Statistics 1977 Health Interview Survey (NCHS-HIS). Less than one-third of working-age persons with visual disabilities were in the labor force compared to almost three-quarters of U.S. population. Only 20% of women with visual disabilities were in the labor force, compared to 43% of men with visual disabilities. Persons with visual handicaps appear to be disadvantaged in attaining higher prestige (generally higher income occupations). Implications on labor force participation of working-age persons with visual loss are discussed.

Kneipp, S. A., Vandergoot, D., & Lawrence, R. E. (1980).

An evaluation of two job-search skills training programs in a vocational rehabilitation agency. Rehabilitation Counseling Bulletin, 23, 202-208.

HANDICAPPING CONDITION: ORTHO SED

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Job search skills include: training programs, job
placements, job contacts, job readiness posture.

ABSTRACT :

A follow-up study assessed the relationship between selected counseling process variables and job-seeking activities. Processes related minimally to outcome measures. Only clint demographics related consistently to job seeking. Findings also suggest that outcomes are multidimensional. Counseling strategies and outcome measures should be planned to address individual client concerns.

Kohring, C., & Tracht, V. S. (1978). A new approach to a vocational program for severely handicapped high school students. <u>Rehabilitation Literature</u>, <u>39</u>(5), 138-146.

HANDICAPPING CONDITION . MULTI ORTHO DEAF

PRIMARY FOCUS: EDUCATIONAL OUTCOME Educational variables include: IQ, reading and math achievement levels.

ABSTRACT :

This article describes a vocational evaluation program for students ages 17-21 with severe and/or multiple handicaps that was used in two Chicago high schools. The goal after program was to assist students in finding employment after finishing schools. Follow-up of the students after completion of the program found that seven were working, 18 were in a special vocational training program, 16 were engaged in subcontract work at school, and two were admitted to college.



Korn, G. A. (1979). Prediction of vocational adjustment of handicapped youth from standard school data available in regional high schools. <u>Dissertation Abstracts</u>

<u>International</u>, 2592A-2593A. Boston, MA: Boston
University School of Education (University Microfilms No. 79-23,877).

HANDICAPPING CONDITION: ORTHO SED MR_SP MR_MO MR_MI SI LD

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment variables studied include: subject's general
intrinsic and extrinsic satisfaction with their job,
employer's rating of the performance, conformance,
dependability, and personal adjustment of the employee.

ABSTRACT :

This study investigated the prediction of vocational adjustment of 42 graduates with handicaps of a regional vocational and technical high school in Massachusetts. It compared standard school data commonly available in school systems to rated measures of individual satisfaction on the job and employers satisfactoriness of the worker's performance in the job. Satisfaction was determined by the Minnesota Satisfaction Questionnaires (MSQ). Satisfactoriness was determined by the Minnesota Satisfactoriness Scale (MSS).

General satisfaction of graduates with handicaps could be predicted from a variety of school information, including number of absences in the twelfth grade, assigned English grade, total absence in high school, English achievement level, assigned mathematics grade, assigned trade grade, and number of dismissals during high school. (Mult. R=.800, 7-16 d.f., p.=<.01).

REC #: 101

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Kregel, J., Wehman, P., & Seyfarth, J. (1985). Community integration of young adults with mental retardation: Transition from school to adulthood. In P. Wehman & J. Hill (Eds.), Competitive employment for persons with mental retardation: From research to practice (pp. 230-246). Richmond, VA: Virginia Commonwealth University.

HANDICAPPING CONDITION: MR_SP MR_MO MR_MI LD

PRIMARY FOCUS: INDEPENDENT LIVING STATUS
Independent living variables include: self-care tasks,
home management, mobility, usage of community facilities,
social integration, personal satisfaction with present
situation, money usage.

ABSTRACT:

The present study assessed the degree of community integration of 300 young adults in Virginia who have participated in special education programs for students labeled mentally retarded. Surveys were administered by trained interviewers on variables related to basic self-care, home management, community usage, use of free time, recreational/leisure activities, and self-satisfaction. Results indicated that the individuals surveyed were generally satisfied with their present situation, and most displayed some degree of competence in the area of independent living skills. Implications of the results if the necessity for future research are briefly discussed.

REC #:



Lam, C. S. (1986). Comparison of sheltered and supported work programs: A pilot study. Rehabilitation Counseling Bulletin, 29, 66-82.

HANDICAPPING CONDITION: MR_SP MR_MO MR_MI

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment variables include: average quarterly and
hourly wages, number of hours worked, intrinsic and
extrinsic job satisfaction and program cost effectiveness.

ABSTRACT:

Two random samples of developmentally disabled workers, one sample from sheltered workshops, the other from a supported work program, were compared in terms of client characteristics, program effectiveness, cost effectiveness, and job satisfaction. Results suggested that the sheltered workshop program was more effective than the supported work program in terms of the number of hours worked by clients, with no differences in earnings. It seemed more cost effective to serve clients with borderline to mild mental retardation in the supported work model and to serve clients with moderate to severe mental retardation in the workshop model. Clients of both programs expressed a high degree of job satisfaction. general, the two programs appeared to be serving clients with comparable characteristics.

REC #:

11



Landesman-Dwyer, S. (1981). Living in the community.

American Journa: of Mental Deficiency, 86(3), 223-234.

HANDICAPPING CONDITION: MR_SP MR MO MR MI

PRIMARY FOCUS: INDEPENDENT LIVING STATUS
Independent living variables include: program size,
staff-client ratio, cost, family involvement, and peer
relationships.

ABSTRACT :

The movement to deinstitutionalize and normalize the lives of individuals with mental retardation has led to significant changes in where people live and how programs are administered. In this literature review, findings about the relationship between "successful" programs and size, staff-to-resident ratio, cost, client characteristics, program type, community support, family involvement, and peer relationships were selectively highlighted. Specific recommendations, originally presented to the President's Committee on Mental Retardation, were made for future program development and evaluation.

Leone, P. (1984). A descriptive follow-up of behaviorally disordered adolescents. Behavioral Disorders, 9, 207-214.

HANDICAPPING CONDITION: SED

PRIMARY FOCUS: EDUCATIONAL OUTCOME
Educational variables include: academic status,
residential status, occupational status.

ABSTRACT:

Teachers, program developers, and administrators of programs for adolescents with behavior disorders are often interested in identifying characteristics of students their programs successfully serve. For many programs, students successfully served are defined as those adolescents moved from the specialized treatment setting to a less restrictive environment. Follow-up studies can identify characteristics of students successfully served and help educators examine their goals and objectives for those students. The present study is a descriptive follow-up of adolescents two to four years after successfully leaving a facility for the behaviorally disordered. The results, including descriptions of demographic, academic, residential, and occupational status of the former students, are presented in the context of an ongoing investigation.



Lessard, K. J. (1982). <u>Developing community housing</u>

<u>services for the blind and deaf-blind students who</u>

<u>have completed our training programs: What is our</u>

<u>responsibility?</u> Vancouver, B.C.: Association for

Education of the Visually Handicapped. (ERIC Reproduction

Service No. ED 240 793)

HANDICAPPING CONDITION: BLIND MULTI VISU

PRIMARY FOCUS: INDEPENDENT LIVING STATUS
Independent living environments cover the range of heavily
supervised to living independently. Skills include
housekeeping, cooking, community experience, time
concepts.

ABSTRACT :

The paper describes the community residence and independent living services offered by Perkins School for the Blind which serves individuals labeled as: multi-impaired, blind, visually impaired, and deaf-blind. The first part reviews existing community living options and emphasizes the need for thorough diagnosis, extensive training in daily living skills and community experience curricula, inservice training for all staff, and cooperation between educators and rehabilitation personnel. The development of the Perkins' program is traced and its current status, which includes an apartment project and houses used for residential programming for 57 clients, is described. The author suggests that educators must become familiar with real estate concepts and principles and with aspects of estate and trust planning.

Levin, E. K., Zigmond, N., & Birch, J. W. (1985).

A follow-up study of 52 learning disabled adolescents.

Journal of Learning Disabilities, 18, 2-7.

HANDICAPPING CONDITION:

PRIMARY FOCUS: EDUCATIONAL OUTCOME Educational outcomes included the indicators of progress of students with LD 4 years after entering the program.

ABSTRACT:

This study was designed to document, four years later, the progress of 52 adolescents with LD who entered a special education program in the ninth grade. The sample was "typical" adolescents with LD: old for their grade placement, with severe reading retardation and moderate math retardation. Theoretically, these students should have been in 12th grade at the time of follow-up. In fact, 16 were still enrolled in a special education high school program: seven were still in high school but in regular classes full-time; 24 had stopped attending high school; and 5 could not be located. Thirty-four students (all those still in school and 11 of the dropouts) were retested on academic skills. Results indicated impressive gains for all students although approximately one-half the achievement growth had taken place in the first year of the LD program. The 11 dropouts were also interviewed about the circumstances of their school leaving. A majority reported that they had been encouraged to leave school before graduation because of persistent academic, behavior, and attendance problems. Data available to the school district at the time of placement into the ninth grade special education program were utilized in a step-wise discriminant analysis, for predicting status at follow-up. The discriminant analysis was quite poor at identifying students who would leave school.



Libbey, S. S., & Pronovost, W. (1980). Communication practices of mainstreamed hearing-impaired adolescents.

<u>Volta Review</u>, 82(3), 179-213.

HANDICAPPING CONDITION: DEAF

PRIMARY FOCUS: INDEPENDENT LIVING STATUS
Independent living outcomes include: the extent of
interpretation, telephone use, and ability to
communicate in home, school and social environments.

ABSTRACT:

The communication practices and attitudes toward communication of 556 mainstreamed, adolescents with hearing impairments were investigated. Data on communication practices with differing persons, use of telephones and hearing aids, self-perception of communication skills, communication problems, and services being received and desired are based on the self-reports of the adolescents with hearing impairments involved. Data on age, hearing loss, and extent of mainstreaming were supplied by their teachers. The data indicate that these adolescents appear to adapt their communication modes and styles to fit the person with whom they are communicating, that they feel reasonably successful communicating with hearing people, but that the communication was not without its problems. Although the data were analyzed for group trends, variability in needs and programming is evident in the ranges of responses of the adolescents.



Little, R. E. (1979). Employment status and attitudes

of former special education students. (University

Microfilms International No. 80-04,062)

HANDICAPPING CONDITION: MR MI LD

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment variables include: employment scatus, income, job satisfaction, and types of jobs.

ABSTRACT:

The sample was 30 former students who were enrolled in secondary special education, work/study courses during 1976, 1977, and 1978. These students were interviewed to understand and analyze the efficiency and adequacy of their work study program. Students were interviewed about four major areas: demographics, employment status, job satisfaction and attitudes towards the school program of which they were a part. The collected data seemed to indicate that gender played a major role in the employability of the individual, dropout status had little impact on one's ability to obtain a job, and that job satisfaction relied mainly on three factors: salary, type of job, and gender.
Recommendations were also made to include more home economics courses in the school curriculum.

Livingston-White, D. J. H. (1983). 1981 Follow-up study
of students enrolled and previously enrolled in the
Michigan School for the Blind and Michigan School
for the Deaf. Lansing, MI: Michigan State Department of
Education, Lansing. Division of Special Education. (ERIC
Document Reproduction Service No. ED 230-012)

HANDICAPPING CONDITION:
MULTI VISU ORTHO DEAF SED MR_SP MR_MO MR_MI SI LD

PRIMARY FOCUS: EDUCATIONAL OUTCOME
Educational variables include: eligibility requirements,
fees, appropriate needs of placement, availability of
educational services, types of educational services.

ABSTRACT:

A follow-up study of currently and previously enrolled students of the Michigan School for the Blind (MSB) and the Michigan School for the Deaf (MSD) is reported. Eligibility guidelines, services, enrollment, costs, and nature of the student body at each institution are described. Development and use of four questionnaires to evaluate eight research questions are described. Among findings considered are that students currently attending MSB have a greater multiplicity of handicapping conditions in conjunction with more severe visual loss than previously enrolled students; that 92 percent of parents surveyed felt their children were appropriately placed whether enrolled in state schools or local education agencies; that few benefits were reported as exclusive provisions of local education agency programs compared to state school services for vision and hearing students; and that rehabilitation agencies worked with a large percentage of students graduating from state schools. It was concluded that the state schools provide unique services which some local education programs are not currently providing. letters and questionnaires are appended.

Loughlin, B. J. (1981). Final project report of optimizing vocational development in the handicapped, September

1980 - January 1981. Trenton, NJ: New Jersey State

Department of Education. (ERIC Document Reproduction Service No. ED 206 893)

HANDICAPPING CONDITION: MR_MO

PRIMARY FOCUS: INDEPENDENT LIVING STATUS
Independent living variables include: grooming skills,
understanding of monetary value, understanding of public
transportation systems, meal preparation, awareness of
community agencies, consumer skills.

ABSTRACT:

A project helped high school students with handicaps develop and implement realistic vocational plans and to develop functional skills in various areas associated with independent living. Designed as an evening course open to students involved full time in special needs and vocational classes, the program consisted of the following two components: (1) a social interaction group that addressed the problems and conflicts facing handicapped students in their community, school, and home; and (2) an independent living skills program that included individual instruction and practical application of skills in such general areas as travel, grooming, home living, and leisure time activities. leaders, students, and parents all reported significant changes in the attitudes and behavior of participants in the social interaction group.

Magyar, C. W., Nystrom, J. B., & Johnson, N. (1977).

A follow-up of former cerebral palsied students at a school for neuro-orthopedically disabled children.

Rehabilitation Literature, 38, 40-42.

HANDICAPPING CONDITION: ORTHO

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Occupational status variables include: 1) nonproductive,
2) students, and 3) employed income.

ABSTRACT:

A follow-up study of 78 former students with cerebral palsy from a residential treatment center was undertaken to examine their occupational, educational, physical, and social status after leaving the center. Data from 48 returned questionnaires indicated that the subjects could be categorized into 3 groups: the non-productive, the students, and the employed. Tabulation of percentages revealed that those employed were most likely to have a high school diploma, most mobile, most capable of traveling alone, most likely to marry, and most likely to attend church regularly. Salary for the employed was found to be minimal. Mean IQ scores for the three groups was not found to be appreciably different.

Martin, J. E., & Agran M. (in press). Factors that impede the creative employment of mentally retarded workers:

A review and analysis. In S. E. Breuning & J. L. Matson (Eds.), Advances in mental retardation and developmental disabilities, (Volume III). New York, NY: JAI Press.

HANDICAPPING CONDITION: MR SP MR MO MR MI

PRIMARY FOCUS: EMPLOYMENT OUTCOME
The employment outcomes studied are factors that impede competitive employment: inadequate productivity, failure to generalize, behavior toxicity induced by psychotropic and anticonvulsant drugs, and social skill deficits.

ABSTRACT:

The purpose of this chapter is to review the vocational habilitation literature and identify factors that appear to impede the competitive employment of persons with mental retardation. This chapter provides an in-depth analysis of four factors associated in the vocational literature with employment failure: (1) inadequate productivity, (2) failure of acquired skills to generalize, (3) behavioral toxicity induced by psychotropic and anticonvulsant drugs, and (4) social skill deficits.

REC #

Mathews, R. M., & Fawcett, S. B. (1985). Assisting in the job search: A behavioral assessment and training strategy. <u>Journal of Rehabilitation</u>, <u>51(2)</u>, 31-36.

HANDICAPPING CONDITION:

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment variables include: observed levels of
performance for each group on 13 job related skills.

ABSTRACT :

The application of a seven-step strategy for assessing and training job-related skills is depicted in this article. An occupational skills assessment instrument was developed to measure an individual's level of skill in a variety of jobrelated situations. The instrument was used in a comparative analysis with employed adults, unemployed adults, adolescents with learning disabilities, and adolescents without learning disabilities. The results showed that employed adults performed significantly better than the other groups. In addition, the findings suggest that the occupational skills assessment is reliable and valid for determining a person's level of skill in job related situations. Materials and procedures for teaching the skills relevant to locating, obtaining, and retaining employment were developed and evaluated. The results of a series of three studies suggest that the instructional procedures were effective in teaching job-related skills to youth with learning disabilities and unemployed adults with work-related disabilities.

REC #:



Mathews, R. M., Whang, P. L., & Fawcett, S. B. (1982).

Behavioral assessment of occupational skills of learning disabled adolescents. <u>Journal of Learning Disabilities</u>, <u>15(1)</u>, 38-41.

HANDICAPPING CONDITION:

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment variables include: students' ratings on
a variety of job related skills.

ABSTRACT:

Little information is available on the levels of basic living skills of adolescents with learning disabilities using direct observation techniques, this study analyzed the differences in levels of occupational skills between youths with LD and their peers without LD. The results showed low levels of employment-related skills for both groups of high school adolescents. However, the students without LD performed significantly better on job-related skills than their peers with learning disabilities. These differences were more marked for non-social interaction skills than for social skills. These findings suggest the need for methods of teaching learning disabled youth the skills of finding and retaining employment.

REC #: 173

Mathews, R. M., & Fawcett, S. B. (1984). Building the capacities of job candidates through behavioral instruction. <u>Journal of Community Psychology</u>, <u>12</u>, 123-129.

HANDICAPPING CONDITION:

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment variables include: employer's ratings of
the appearance and content of application materials
and likelihood of hiring an applicant.

ABSTRACT :

Behavioral instruction procedures designed to teach the skills involved in completing employment application materials were evaluated using a multiple baseline design. The results showed that training was effective in teaching employment application completion and resume writing skills to three adolescents with learning disabilities. Rating data obtained from potential employers suggested that training improved the appearance and content of the application materials. addition, the employers viewed applicants as better qualified for employment after training and indicated that they were more likely to invite the applicants to participate in a job interview. This study demonstrates an effective strategy for building the capacities of job candidates and illustrates a method for assessing the impact of training on employer's perceptions of the applicants.

REC # :



McDevitt, S. C., Smith, P. M., Schmidt, D. W., & Rosen, M. (1978). The deinstitutionalized citizen: Adjustment and quality of life. Mental Retardation, 16, 22-24.

HANDICAPPING CONDITION: MR_MI

PRIMARY FOCUS: INDEPENDENT LIVING STATUS
Community functioning variables include: vocational
adjustment, economic adjustment, social adjustment, and
personal adjustment.

ABSTRACT :

This paper describes an intensive analysis of the adjustment of 18 persons leaving a residential institution for the mentally retarded and their independent status after completing rehabilitation programs. These ex-students had been discharged from the institution between 1963 and 1974 with most leaving in the late 1960's. The majority were of mild to borderline intelligence with an average full scale IQ at time of discharge of 73, as measured by the Wechsler Adult Intelligence Scale (IQ range 53-92). These interviews were conducted in the subjects! homes using an evaluation instrument which encompassed areas of vocational and economic adjustment, as well as personality, emotional and social functioning. The analysis was organized into four general areas of community functioning: vocational adjustment; economic adjustment; social adjustment; and personal adjustment.

McDonnell, J., & Hardman, M. (1985). Planning the transition of severely handicapped youth from school to adult services: A framework for high school programs. Education and Training of the Mentally Retarded, 20, 277-287.

HANDICAPPING CONDITION: MR SP MR MO

PRIMARY FOCUS: EDUCATIONAL OUTCOME
This article presents a procedural framework to assist
local programs to conduct effective transition planning.

ABSTRACT :

The overlap between the principle functions of high school and the scope and content of transition planning requires that educational programs begin taking responsibility for initiating and coordinating planning on a local level. High school programs must complete 3 critical activities. First, initiate a planning process that sequences critical decisions across the student's high school career so that all potential service options and support needs may be identified and established prior to graduation. Second, educate parents so that they may actively participate in the planning process and advocate for needed services. Finally, establish format links between education and adult service agencies to allow comprehensive planning for youth with severe handicaps.

REC # :

Mertens, D. M., & Seitz, P. (1982). Labor market experiences of handicapped youth. Columbus, OH: The Ohio State University, The National Center for Research in Vocational Education.

HANDICAPPING CONDITION: HI MR_MI LD

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment variables include: employment/unemployment
rates, earnings.

ABSTRACT :

This report describes the collection of the Individualized Education Plans (IEPs) for NLS youth respondents and also presents an initial analysis of the IEP data. The focus of the report is on the employment and wage effects of secondary vocational education for the handicapped. Evidence suggests that vocational graduates with handicaps had a higher rate of labor force participation and higher employment rate than their non-vocational peers with handicaps. However, insufficient data and wide variability of responses prevent firm conclusions. Chapter III compares labor market experiences of youth with handicaps with youth without handicaps along dimensions of employment earnings. NLS data base appears to be less than ideal for studying this issue, but it does provide data to examine labor market and educational activities of youth with handicaps in a limited way. New and creative methods to use NLS youth surveys and IEP data to their maximum potential need to be developed.



Messerer, J., & Meyers, G. (1983). The adequacy of

high school preparation on the adult adjustment of

learning disabled youth. Chicago, IL: Northeastern

Illinois University. (ERIC Document Reproduction Service

ED No. 248 681)

HANDICAPPING CONDITION: SED LD

PRIMARY FOCUS: EDUCATIONAL OUTCOME
Employment variables include: high school course work;
importance of English, mathematics, vocational, special
education, adequacy of education, post-secondary
education, and recommendations.

ABSTRACT:

The sample consisted of 90 students with learning disabilities (LD), 19 with behavior disorders (BD), and 37 regular class (RC) graduates of greater Chicago high schools were surveyed to determine what, if any, difficulties they were experiencing after leaving high school. Results indicated that the LD's required additional training in job specific skills, instruction in writing checks, and felt unprepared to cope with "everyday living." LD's reported that classes in mathematics, English, and special and vocational education were most helpful for coping with life after high school. LD's and BD's envisioned themselves as living in the same location 10 years from the present where RC's did not. Of added interest was the finding that the parents of LD's appeared to have received less education compared to BD and RC counterparts. Implications for further research and for high school curriculum are discussed.

REC # :



Mithaug, D. E., & Horiuchi, C. N. (1983). Colorado statewide

follow-up survey of special education students and

appendices. Denver, CO: Colorado State Department of

Education. (ERIC Document Reproduction Service No. ED 250

902)

HANDICAPPING CONDITION: VISU ORTHO DEAF SED MR MI SI LD

PRIMARY FOCUS: EDUCATIONAL OUTCOME Educational variables include: graduation status, usefulness of program, post-school adjustment.

ABSTRACT:

The report discusses a statewide follow-up survey of 234 graduates of special education programs in Colorado. An initial section, which reviews and summarizes follow-up research, notes the limitations of past studies and describes the sequence of the Colorado study, from initial efforts (appointment of panel of experts, development of personal interview questionnaire) to pilot testing and conduction interviews and collecting data.

Results are summarized in terms of information, school information, post-school information, and cross tabulations (correlates in high school preparation, regular education, training needs, sex, age, urban/rural, special education program, and handicapping condition). Among findings were that students who were happy with their high school preparation were better adjusted on their jobs after graduation; younger students appeared to have been better prepared for post high school adjustments than older students; and students from resource classrooms exhibited greater occupational successes than respondents from self-contained classrooms or work study programs. Implications are noted, including the need to secure parental cooperation and contribution in the vocational adjustment process. Priorities stressed by respondents for specific vocational skills, as well as social and independent living skills, are noted. Extensive appended materials include a sample survey and detailed survey results.

Mithaug, D. E., Horiuchi, C. N., & Fanning P. N.

(1985). A report on the Colorado statewide follow-up survey of special education students. <u>Exceptional</u>
Children, 51, 397-404.

HANDICAPPING CONDITION: VISU ORTHO DEAF SED MR MI SI LD

PRIMARY FOCUS: EMPLOYMENT OUTCOME Employee variables include: rates, income, job satisfaction.

ABSTRACT:

In April of 1982, the Colorado Department of Education authorized a follow-up survey of students completing special education services in 1978. A total of 234 graduates from programs in 26 administrative units responded. The results of the survey suggested that special education programs have been influential in preparing students with handicaps for post-high-school adjustments in the community. Although most graduates were employed, their earnings were at minimal level. Furthermore, most of the respondents lived at home with their parents, suggesting a patter of financial instability and family dependence. Respondents indicated a need for more training in specific areas such as social participation and job search and selection. also reported that special education teachers have been more helpful in finding jobs for them than their parents.

Mitra, S. (1976). Rehabilitation research capacity

building: Follow-up studies. Final Report (Monograph
No. 2). Baltimore, MD: Copin State College, Department

of Rehabilitation Counseling. (ERIC Document Reproduction

Service ED No. 173-554)

HANDICAPPING CONDITION : DIS MR_MO MR_MI

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment outcomes measured included: individual
closure status, gross weekly income at closure, and
gross weekly income at follow-up.

ABSTRACT:

This series of follow-up studies concerned 301 clients of a rehabilitation program. Two hundred fifteen were mentally retarded and 86 were non-retarded. They were clients of the Social and Rehabilitation Service research and development projects in the District of Columbia, and the Model Cities Project in Maryland. The clientele were primarily Black, urban ghetto residents. indicated that a placement program which included placement homes, training, and job placement was imperative for vocational success of institutional adult retardates discharged to independent community status. These institutional dischargees also required long term post-employment services. For non-institutionalized clients with mild retardation, job training and placement according to potential were essential rehabilitation services which had sustaining effects on vocational success. For retardates the placement quality, reading ability, and absence of secondary disabilities were primary determinants of income at follow-up.

Monohan, L. H., Giddan, N. S., & Emener, W. C. (1978).

Blind students: Trarsition from high school to college.

Visual Impairment and Blindness, 72, 85-87.

HANDICAPPING CONDITION : VISU

PRIMARY FOCUS: EDUCATIONAL OUTCOME
Accuracy of counseling center's prediction of college
success.

ABSTRACT:

An evaluation of selected high school students with visual impairments, conducted by The Florida State University Counseling Center over a 10-year period, indicated that 75 percent had good potential for successful college work. follow-up study of available students revealed that only 25 percent had been successful in completing their degrees, and that there was a 32-percent dropout rate. In an attempt to reduce the dropout rate, a "College Orientation Program for the Visually-Handicapped" was established to help students to make the difficult transition from high school to college. Peer counseling, integration into the sighted college community, and better mobility training are recommended, as well as suggestions for investigation of other variables involved in successful pursuit of college work.



REC #:

Norman, C. A., & Zigmond, N. (1980). Characteristics of children labeled and served as learning disabled in school systems affiliated with child service demonstration centers. <u>Journal of Learning Disabilities</u>, 13, 16-21.

HANDICAPPING CONDITION:

PRIMARY FOCUS: EDUCATIONAL OUTCOME
Educational variables include: intelligence quotient
data; academic achievement variables include: reading,
math.

ABSTRACT:

Intake placement data were collected from the files of 1,966 students labeled and served as learning disabled in Child Service Demonstration Centers (CSDC) in 22 states. The information included achievement and IQ data, age and grade. The mean age was 11.83 years and the mean IQ was 92.5. There appeared to be a lack of consistency in the characteristics of students labeled as learning disabled. Younger students were much less severely underachieving than were older students. Significant differences were found among CSDSs in mean IQ and in the percentage of students meeting an arbitrary criterion of severe discrepancy. In addition, 54% of the CSDCs included students whose IQs were at or below 69. The results seem to indicate that a heterogeneous, ill-defined population of students is being labeled as learning disabled.

Norton, R. E., & Belcher, J. O. (1984). A guide to linkages between vocational education and organized labor in the United States. Columbus, OH: The National Center for Research in Vocational Education, Ohio State University.

HANDICAPPING CONDITION:

PRIMARY FOCUS: EDUCATIONAL OUTCOME
The educational variables summarized in the study
include: program administration training, instructor
training, and course program evaluation.

ABSTRACT:

The purpose of this study was to design a multiyear plan for improving vocational education through strengthened linkages between domestic vocational education and organized labor. One specific activity of the study was to identify and describe present linkages between domestic vocational education and organized labor programs that indicate relative strengths.

The report identifies and describes 21 exemplary and innovative programs already in full operation. Thirteen guidelines for developing more effective behaviors between organized labor and vocational education are also presented.

REC #:



O'Reilly, D. E. (1975). Care of the cerebral palsied:

Outcome of the past and needs for the future.

Developmental Medicine and Child Neurology, 17, 3-7.

HANDICAPPING CONDITION: MULTI HI

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment variables include: level of functioning,
educational and occupational status.

ABSTRACT :

A follow-up study of 1700 patients with cerebral palsy programmatically evaluated at the Cerebral Palsy Clinic of the Cardinal Glennon Memorial Hospital for Children in St. Louis, Missouri since 1947 was conducted to examine the following relationships: Among the school age population, self-care and level of functioning as well as educational status. Among the adult population, level of functioning, self-care, education, occupation, and employment were examined. The conclusion based on the above findings was that there has been almost no increase in employment for the adult with cerebral palsy in 25 years. However, children with cerebral palsy who appear to be of normal level of functioning as well as independent in self-care have a much better chance of attending regular school and going on to gainful employment. Implications for the future of the patients more severely impaired by cerebral palsy were also discussed.

Olshansky, S., & Beach, D. (1975). A five-year follow-up of physically disabled clients. Rehabilitation

<u>Literature</u>, 36, 251-258.

HANDICAPPING CONDITION: ORTHO

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment variables include: employment status, work
history, additional financial
support.

ABSTRACT :

A follow-up study of 229 clients with physical disabilities was undertaken to determine how successful a community workshop had been in helping people with physical disabilities achieve employment. Data from telephone inquiries were tabulated as percentages and revealed that those more likely to be employed were the younger worker, the high school graduate, the person who did well in the community workshop and stayed longer in the program. The individuals with congenital disabilities also did better than those acquiring the disability after 20. It was also found that one-half of the employed had previously been on either public welfare or social security. Those who had been separated, divorced or widowed did rather poorly in finding work. Factors were not identified as to why some were willing to give up public welfare and enter the job market, often at a low level, while others were not.

Passmore, D. L. (1982). Vocational and economic implications of deafness. <u>Journal of Epsilon Pi Tau</u>, <u>8</u>, 34-38.

HANDICAPPING CONDITION: DEAF SI

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment statistics include: underemployment, income.

ABSTRACT :

Labor statistics reveal that the population with hearing impairments is usually underemployed and earns less than the general population. Furthermore, the earlier a person has become deaf and the more severe the effects of deafness on communication abilities, the lower the income of the person with hearing disabilities. Their educational attainment also lags behind that of hearing persons. The vocational consequences of deafness suggest that career education is needed. It is still too early to determine whether recent legislation has a positive effect. However, an example of positive success is the technical training at the National Technical Institute for the Deaz (NTTD). Over 1,000 students per year attend their training. Graduates are 90% employed.

Passmore, D. L., & Marron, M. (1980). Stating expected

employment outcomes of occupational programs: A case

study. University Park, PA: Pennsylvania State University

and National Technical Institute for the Deaf (NTID).

(ERIC Document Reproduction Service No. ED 203 133)

HANDICAPPING CONDITION: DEAF

PRIMARY FOCUS: EMPLOYMENT OUTCOME

Employment variables include: the kind and level of work, classifying applicants, job openings.

ABSTRACT:

Studying the employment outcomes expected from educational programs at the National Technical Institute for the Deaf (NTID) can aid planners of other occupational programs. The main barriers to planning education for work are the inaccessibility or unavailability of information, the arbitrary nature of occupational classification, and the insensitivity to planning problems. To overcome these barriers, NTID specified expected employment outcomes of their programs in terms of the "Dictionary of Occupational Titles" (DOT) occupational names and NTID program managers met to revise these names and codes and to match DOTs to U.S. Census occupational classifications. A total of 211 DOTs were identified for NTID's 14 programs. has a number of implications for practice. instance, the NITD catalog could be updated without reference to worker age or sex, and the public internal and external to NTID would find it easier to use the catalog. This use of DOT classifications has also facilitated research and development efforts in the areas of data collection, data analysis, and comparative analysis. Although this procedure for specifying employment outcomes could be adopted in planning other occupational programs, caution is suggested due to the vagueness of the occupational classifications system applied.

REC #:



Pflaster, G. (1981). A second analysis of factors related to the academic performance of hearing impaired children in the mainstream. The Volta Review, 83(2), 71-80.

HANDICAPPING CONDITION:

PRIMARY FOCUS: EDUCATIONAL OUTCOME
Education variables studied include: overall linguistic
ability, motivation, speech reading skills, peer
relationships, personal adjustment, and communicative
ability, among others.

ABSTRACT :

Eleven oblique (correlated) factors are identified and discussed in terms of their interrelationships. The factors are generally more accurate descriptors of the orthogonal (uncorrelated) communicative, linguistic, and personality factors identified in an earlier factor analytic study. Two factors central to the interrelationships are detailed. These are set as the basis for emphasizing the development of auditory/oral communication skills in the preparation of children with hearing impairments for integration into the mainstream.

Phelps, A. L. (1986). Transitional programming for special needs youth. Champaign, IL: Secondary Transition Intervention Effectiveness Institute, University of Illinois at Urbana-Champaign.

HANDICAPPING CONDITION: DIS LD

PRIMARY FOCUS : EMPLOYMENT OUTCOME Interfacing education and employment to create smooth transitions from school to work for youth with special needs are discussed.

ABSTRACT :

This paper reviewed the historical origins of the transition movement and provided a conceptual framework for examining transition programming and services. Three Federal programs providing transitional services were reviewed to identify the effective practices. Additional program experimentation, evaluation, and longitudinal studies were recommended by the author as needed to examine the inter-relationships and effects of such interventions as vocational assessment services, career exploration programs, career guidance, job clues and parent/friend support networks.



Phelps, A. L. (Ed.) (1986). School-to-work transition

for handicapped youth: Perspectives on education and

training. Champaign: Office of Career Development

for Special Populations, College of Education, University

of Illinois at Urbana-Champaign.

HANDICAPPING CONDITION:
BLIND MUITI VISU HI ORTHO DEAF SED MR_SP MR_MO MR_MI
SI LD

PRIMARY FOCUS: EDUCATIONAL OUTCOME

The six major education and training systems are discussed

ABSTRACT :

This book provides miltiple perspectives on the education and training of individuals with handicaps in the U.S. The book devotes a separate chapter to each of the six major education and training systems in the U.S. - secondary education, post-secondary education, public supported job training programs, business and industry sponsored training, higher education, and private trade schools. It also devotes one chapter to the unique problems of transition of individuals with moderate and severe handicaps and one chapter to the education and training of youth with disabilities in Western Europe.

The chapters discuss the present state of education and training and suggest improvement. Suggested improvements include improving programmatic accessibility and attitudes toward the handicapped at institutions of higher learning and better implementing of job training plans at local levels in Job Training partnership Act (JTPA) programs.

REC #: 112

Piuma, C. (1980). <u>Developing a vocational education</u>

training program for severely handicapped adolescents

and young adults: A feasibility study. Berkeley, CA:

Far West Laboratory for Educational Research and

Development.

HANDICAPPING CONDITION: MR MO

PRIMARY FOCUS: EDUCATIONAL GUTCOME
The education variable studied was faculty attitudes regarding students' work potential.

ABSTRACT :

This study investigated the feasibility of developing five vocational education curricula for young people with severe handicaps (e.g., trainable mentally retarded) aged 13 to 21, that would enable them to work in five different employment areas. One goal of the study was to determine whether school staff members think their students have the potential to master the skills needed to work in these occupations. A second goal was to assess the interest and/or resistance of community business people to hiring students with severe handicaps who had completed the appropriate vocational education program. Interviews were conducted with school staff from four programs teaching vocational educational skills to students labeled as trainable mentally retarded in Contra Costa County, California, as well as with representative Contra Costa business people. The study showed that there is both a need and a desire to expand and develop the existing vocational education training program for students with severe handicaps.

REC #:



Plisko, V. W., & Stern, J. D. (Eds). (1985). Educating handicapped students. In <u>The Condition of Education</u> (pp. 177-199). Washington, DC National Center for Education Statistics, U.S. Dept. of Education.

HANDICAPPING CONDITION:
BLIND MULTI VISU HI ORTHO DEAF SED MR_SP MR_MO MR_MI
SI LD

PRIMARY FOCUS: EDUCATIONAL OUTCOME
Education variables include: academic performance,
participation in LD and gifted programs, percent of
accessible classrooms, type of academic program, number
of special teachers employed, number of students in
special education programs.

ABSTRACT :

This chapter includes very comprehensive statistics on the educating of students with handicaps in the U.S. Data were obtained from various reports and studies such as the <u>Sixth Annual Report to Congress</u>, and the <u>Hich School and Beyond</u> study. The data cover areas such as educational achievement, the distribution of students in school programs. Data are often broken down by race/ethnicity and sex.

The chapter also makes several conclusions based on the data about trends in special education program participation, instruction, and Federal funding. Some of the conclusions are made: students with learning disabilities have been served by programs since 1976-77 while most other categories have declined; more than two-thirds of children with handicaps received their instruction in regular classes; Black students were disproportionately represented in programs, while Asians were least likely to participate.

Polloway, E. S., Epstein, M. H., Patton, J. R., Cullinan, D., & Luebke, J. (1986). Demographic, social, and behavioral characteristics of students with educable mental retardation. Education and Training of the Mentally Retarded, 21(1), 27-34.

HANDICAPPING CONDITION: MR MI

PRIMARY FOCUS: EDUCATIONAL OUTCOME
Educational outcomes measured are: regular education
class placement, years in special education programs,
social status, and level of hyperactivity.

ABSTRACT :

In light of hypothesized and documented changes within the ropulation of students labeled educably mentally retarded (EMR) students in the schools, the authors analyzed data collected on 130 older and 104 younger EMRs. The intent of the study was to describe the demographic and sociobehavioral characteristics of these students and then to compare these findings to traditional conceptualizations of this population. presented on intellectual level, racial background, degree of integration into regular programs, placement history, social status and presence of spacific behavioral disorders. results are discussed in terms of current practices and implications for programming needs in the future.

REC #:



Quanty, M. (1977). Initial job placement for JCCC

students, classes of 1973-1976. Overland Park, KS:

Office of Institutional Research, Johnson County Community

College. (ERIC Document Reproduction Service No. ED

144-666)

HANDICAPPING CONDITION : DEAF

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment outcomes include: types of jobs, how many are
working in the field they trained for, income, job entry
skills vs. job advancement, amount of time employed, and
comparison with non-handicapped co⁷ orts.

ABSTRACT:

A follow-up job placement study of the 228 persons who either graduated or left Johnson County Community College with marketable skills in 1975-76 produced 191 interview respondents. Findings included the following: the average age of respondents was 28, and 34% were 30 years or older; 53% were male; 64% had enrolled to acquire job skills and 36% to prepare for job advancement; 82% were currently employed in jobs utilizing program skills; 95% rated the quality of instruction at JUCC as excellent or good; and 82% of those who had participated in approved work experiences as students rated these experiences as good or excellent. A comparison of annual follow-ups from 1972-73 to 1975-76 showed that students employed in study-related jobs was above 80% for all four years, that unemployment was slightly higher in 1976, that more students were attending school and not working in 1976, and that the number of students evaluating programs as excellent or good was higher in 1976 than in previous years.

REC #:



Radar, B., Shapiro, H., & Rodin, E. A. (1978). On placement of multiply handicapped clients into the open job market. Rehabilitation Literature, 39, 299-302.

HANDICAPPING CONDITION: MULTI HI

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment variables include: the success rates of
employability.

ABSTRACT :

This paper reviews the experience of an attempt to place people with severe disabilities in competitive employment. Three phases of programming were involved, including comprehensive diagnostic evaluation (medical and clinical), workshop evaluation, and adjustment and work exposure in open competitive employment.

Fifty-eight persons participated in the project, with 44 moving into the workshop phase of the program. Of those who completed the workshop, 76% were employed. Follow-up studies over a two-year period (longer than in most employment studies) indicate that the success rate has a significant drop.

Another aspect of this paper is to compare the characteristics of the population with those found in an earlier study with a larger client population. Although there is a difference in sample size, there are a number of similarities in the populations, particularly in areas that might interfere with employment.

REC #:



Ragosta, M., & Kaplan, B. A. (1986). A survey of handicapped students taking special test administrations of the SAT and GRE, (Report Number 5). Princeton, NJ: College Entrance Examination Board, Educational Testing Service and Graduate Record Exams Board.

HANDICAPPING CONDITION: VISU HI DEAF LD

PRIMARY FOCUS: EDUCATIONAL OUTCOME
This study evaluated testing accommodations for people
with disabilities and developed additional information
on the severity or kinds of disabilities within categories
of handicap.

ABSTRACT :

This study examined the responses of people with disabilities to questionnaires on special testing accommodations both for college testing and for SAT and GRE. The study reported on the high level of overall satisfaction with special testing accommodations and covered extensively the complaints of a small minority. These complaints involved the test itself and the conditions of testing, including time and space considerations.

A second major section of the report dealt with a comparison of accommodations made for the SAT or GRE with accommodations provided for college testing. The standardized testing was offered in special versions and with extra time more frequently than were college tests.

REC #:



Reagan, M. W., Murphy, R. J., Hill, Y. F., & Thomas,

D. R. (1980). Community placement stability of behavior problem educable mentally retarded students. <u>Mental</u>

<u>Retardation</u>, <u>18</u>,(3), 139-142.

HANDICAPPING CONDITION: MR SP MR MO MR MI

PRIMARY FOCUS: INDEPENDENT LIVING STATUS
The amount and direction of placement
stability/instability was studied through an empirical
research. Data were collected regarding the percentage of
individuals shifting placement and whether these moves are
toward more or less restrictive setting.

ABSTRACT:

Follow-up community placement data were collected for 186 students with behavior problems and designated as being educable mentally retarded at 6, 12, and 18 months after discharge. Placement stability and placement instability were analyzed for natural home, foster home, and group home placements. Greatest stability throughout the follow-up period was observed for students initially placed in their natural homes. Comparable data for foster home and group home placements indicated decreasing placement stability throughout this period. This decline, however, was largely the result of increasing movement toward less restrictive settings. need for additional research involving long-term follow-up of community-placed persons with mental retardation with special attention to personal and environmental factors which predict successful community placement was emphasized. Emphasis was placed on the need for additional research involving long-term follow-up of alumni with special attention to personal and environmental factors which predict successful community placement.

REC #:



Redding, S. F. (1976). Post-secondary school life adjustment

of retarded and non-retarded low-functioning students.

(University Microfilms International No. 76-30,631)

HANDICAPPING CONDITION: MR MI LD

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment outcomes include: period of time between
graduation and first job, skill level of job, income,
number of jobs since graduation, full vs. part-time
employment, method of obtaining job, reasons for leaving
jobs, and unemployment rates.

ABSTRACT :

This study explored differences in life adjustment patterns of graduates of secondary school special education programs for those students labeled educable mentally handicapped and graduates of secondary school cooperative work training programs designed for students who are non-retarded but low-functioning.

The author concludes that CWT graduates found employment in more skilled occupations, earned more money, were more self-supporting, had more full-time as opposed to part-time jobs, were more inclined to leave jobs of their own choice, had a lower unemployment rate at the time of the study and paid more for housing. There were also strong indications of normal or near-normal adjustment among the retarded group and a common weakness in social and civic adjustment; among both the EMH and CWT graduates.

REC # :

88

Reid, G. M. (1978). A comparative analysis of selected

characteristics of mildly mentally retarded adolescents

and their subsequent adult status. (University Microfilms

International No 79-06.368)

HANDICAPPING CONDITION: MR_MI

PRIMARY FOCUS: INDEPENDENT LIVING STATUS
IL variables include: present living circumstances,
financial circumstances, social living arrangements,
transportation, leisure time activities, marital status.

ABSTRACT :

This research effort was designed to identify which statistical or clinical predictive variables, as determined 15 years ear? lar when the original 183 subjects were ninth graders in a midwestern metropolitan public school, distinguished among persons with mild retardation on seven specific indications of adult status. Out of this group, 83 were located and interviewed for the follow-up study. These individuals were evaluated on three criteria: occupational level, salary bracket, and present living quarters. The first two criteria were calculated for three time periods: CA 18-22, CA 22-29, and time contact CA 30. Present living quarters was a variable for the third period of contact (CA 30) only. follow-up study found that the 30 year olds were generally self-sufficient persons who functioned in normal social arrangements.

REC #:

. 5



Riccio, J. A., & Price, M. L. (1984). A transitional employment strategy for the mentally retarded: The final STETS implementation report. New York: Manpower Demonstration Research Corporation.

HANDICAPPING CONDITION: VISU SED MR MO MR MI SI LD

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment variables include: STETS demonstration data
duration of paid employment, percentage of wages paid
by employer, employer evaluation of employees and
follow-up study outcomes labor market performance
among others.

ABSTRACT:

This report describes the implementation and preliminary results of the Structured Training and Employment Transitional Services (STETS) program - a transitional employment strategy designed to help young adults with mental retardation become competitively employed. The experimental sample consisted of 284 participants whose average age was 20.

he program was divided into three phases; in Phase 1 participants were given up to 500 hours of paid employment in sheltered work settings; in Phase 2, non-sheltered positions that could evolve into regular jobs were provided for the participants; and in Phase 3, participants' Phase 2 positions turned into regular jobs with only as-needed counselor support.

During the study, $69\frac{1}{8}$ of the employers rated phase 2 participants "as good as" or "better than" other new employees. Preliminary findings, gathered six months after random assignment, show over two-thirds of the experimental group was in paid training on non-training jobs - a higher figure than the control group.

REC #:

.50

Richardson, N. R. & Hill, J. (1980). An evaluation of vocational placement success at a comprehensive rehabilitation center: A third measurement.

Rehabilitation Literature, 41, 19-22.

HANDICAPPING CONDITION: ORTHO SEC MR MI

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment variables include: percentage of time
employed, employment status, type of work, length of stay
at present job site, and number of jobs held.

ABSTRACT :

A follow-up survey about vocational success was given to 38 participants in the Easter Seal-Goodwill Industries Rehabilitation Center, located in New Haven, Connecticut. The study asked questions about employment status, type of work, income, as well as several questions dealing with home environment. The vast majority (82%) of the participants were employed. Thirty-two percent had found their jobs through the center, the rest had gone out on their own initiative or used friends and relatives. Although 61% stated that they used some form of public aid, 100% stated that they would much rather work than use assistance. The success of this project has caused it to expand to other areas of the state and increase its involvement with the business community.



Richardson, N. R., & Krieger, N. (1976). An evaluation of vocational placement success at a comprehensive rehabilitation center. Rehabilitation Literature, 37, 237-241.

HANDICAPPING CONDITION: HI ORTHO SED MR MO MR MI

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment variables include: employment success, job
tenure.

ABSTRACT :

A follow-up study of 92 clients placed in jobs in varied industrial settings was conducted to assess the employment success as measured by employment status at the time of the interview and percent time employed since first job placement. over a two-year period. A summary of the findings indicates that 83% lived in private homes, with 63% employed at the time of the first follow-up, and 43% employed at the time of the second follow-up. Decrease in employment status was not found to be statistically significant. No change in adjustment to their handicaps was reported between follow-ups. Mode of transportation, home helpfulness, and postplacement contact with agencies were also reported. Increase in self-esteem and benefit/cost ratio were also included in their results.



Roessler, R., & Bolton, B. (1985). Employment patterns of former vocational rehabilitation clients and implications for rehabilitation practice. Rehabilitation Counseling Bulletin, 28, 179-87.

HANDICAPPING CONDITION: HI ORTHO SED LD

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment variables include: weekly income, hours per
week, types of work, number employed, and employer
evaluation.

ABSTRACT:

A follow-up interview was conducted for 57 former rehabilitation (VR) clients in Arkansas regarding factors bearing on their perceptions of rehabilitation services, work-related problems, employer-hiring attitudes, and support of family and friends suggested 12 recommendations for enhancing the employment prospects of persons with handicaps. Selected recommendations for practice included more (a) job-seeking skills training and job club programs for clients, (b) training of parents and families to assist in and support clients in the job-seeking reass, (c) vocational counseling with a career dev comment focus, (d) long term counselor follow-up of client employment status, and (e) counselor efforts in job development.



Rosenberg, J. (1978). The relationship of types of post-high school education to occupation and economic independence of physically handicapped adults.

Rehabilitation Literature, 38, 45-49.

HANDICAPPING CONDITION:

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment variables include: employment status, types of job, degree of financial independence.

ABSTRACT :

The relationship of levels and types of education to employment and financial independence was examined on the basis of the experience of 79 graduates of a public school for children with orthopedic handicaps. The data suggest that the positive relationship of college education and occupation established for normal adults is ambiguous for this population. Those with the best chance for full-time employment and an adequate level of income were the graduates with vocational education after high school.

It is suggested that further classification of the relationship of types of education to economic functioning is needed to provide an information base for planning educational and counseling program for students with handicaps.

REC #:



Ross, R. T., Begab, M. J., Dondis, E. H., Giampiccolo,

J. S. Jr., & Meyers, C. E. (1985). Lives of the Mentally

Retarded: A forty-year follow-up study. Stanford,

CA: Stanford University Press.

HANDICAPPING CONDITION: MR_MI

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment variables include: occupational status and
history, income, job attainment, education-work
relationship, job satisfaction work difficulties,
participation in unions, types of jobs, and employment
rates.

ABSTRACT:

This book reports on the adult success of 160 San Francisco school children who had been identified as "educable mentally retarded" in the 1920's & 1930's and placed in segregated special classes. The book examines their families, spouses, and siblings and the comparative adult success of a matched group of nonsegregated age peers.

The excerpts focus on education, work, marriage and family, social milieu, and theoretical and practical implications of the study. The subjects' performance in school was inferior to that of the sibling and control groups. also aspired to jobs of lower socioeconomic status, had less postsecondary training, and predicted a lower level of educational attainment if they were to start school over again. subjects had an employment rate of 80% in jobs with the lowest socioeconomic status, earning the lowest family income. The proportion of subjects who were married was below the national average. The school performance of those with children paralleled that of the subjects themselves. Residence patterns, overall social competence and participation in terms of finances and ability to support themselves are examined. Data are given on the health, religious, leisure, and political activities, compliance with the law, and military service.



Rusch, F. R. (1985). Introduction to supported work.

Champaign: Secondary Transition Intervention

Effectiveness Institute, University of Illinois at

Urbana-Champaign.

HANDICAPPING CONDITION:
MULTI VISU MR_SP MR_MO MR_MI LD

PRIMARY FOCUS: EMPLOYMENT OUTCOME
This article presents a supported-work model. The characteristics of a supported-work approach include assessment of work skills, and identification of job requirements, and aspects of the placement process.

ABSTRACT :

The purpose of this article is to introduce supported work. The first section of this article concentrates on what is new and different about supported work; the second section provides an overview of the characteristics of the supported-work approach, the target populations that have been exposed to supported-work programs offered by a local rehabilitation agency in the State of Illinois, and the staffing and funding patterns that have been used by the Illinois program. Recommendations for personnel preparation are offered by the author in this article.





Schalock, R. L. (1986). <u>Current approaches to assessing</u>
a person's quality of life. Paper presented at the
110th meeting of the American Association on Mental
Deficiency, Denver, CO.

HANDICAPPING CONDITION : MR_SP MR_MO MR_MI

PRIMARY FOCUS: INDEPENDENT LIVING STATUS
Independent living variables studied are: environmental
control, social interaction, community utilization,
and family involvement among others.

ABSTRACT :

This paper discusses several issues regarding the operationalization and measurement of the concept of quality of life. It also includes a sample research study. The first part of the paper discusses a number of reasons to focus on quality of life; the second part describes two perspectives on operationalizing the concept. The third part of the article outlines important criteria for developing reliable and valid measures.

The paper ends with an example of a study and questionnaire designed by the author. The sample consisted of 85 individuals with mental retardation. The study concluded that persons who retained their living and work placements, and those who were living independently and employed part time had the highest quality of life scores. Persons in mental health facilities and those living with their parents had the lowest scores.

REC #:



Schalock, R., Harper, R. S., & Carver, G. (1981).

Independent living placement: Five years later. American Journal of Mental Deficiency, 86(2), 170-177.

HADDICAPPING CONDITION: MR_MO MR MI

PRIMARY FOCUS: INDEPENDENT LIVING STATUS
IL variables include: living costs, community access,
friendship patterns, leisure time, personal maintenance,
food preparation, behavioral skills.

ABSTRACT :

The placement success and quality of life of 69 persons with mental retardation placed into independent housing 5 years previously was evaluated. Eighty percent (n=55) were still in their original independent housing placement. the basis of multiple regression analysis, the most significant predictor variables were the behavior skills areas of personal maintenance, communication, community integration, clothing care and use, and food preparation. Unsuccessful placements were related to bizarre behavior, nutritional problems and inadequate home maintenance. Quality of life variables analyzed included employment, finances, community utilization, leisure-time usage, and friendship patterns. Analysis of the quality of life variables presented a mixed picture: Part of the data reflected low income and possible loneliness; on the other hand, community utilization occurred frequently and involved normal activities. Clients reported that they were proud of their apartments and felt good about "doing their own thing." In light of the results, an extended assistance-training model was presented.



Schalock, R. L., & Lilley, M. A. (1986). Placement from community-based mental retardation programs: How will clients do after 8 to 10 years? American Journal of Mental Deficiency, 90(6), 669-676.

HANDICAPPING CONDITION: MR_SP MR_MO MR_MI

PRIMARY FOCUS: INDEPENDENT LIVING STATUS
Independent living variables include: current programmatic status, living-work placement, financial status, training involvement, social emotional behavior, and number of disabilities.

ABSTRACT:

The placement success and quality of life of 85 persons with mental retardation placed into independent housing and competitive employment 8 to 10 years ago was evaluated. Three groups emerged on the basis of clients current programmatic status, living-work placement, and financial status. Family involvement, social-emotional behavior, number of disabilities, symbolic operations, and auditory-visual processing were found to discriminate between successful and unsuccessful living and work outcomes. For assessed quality of life, significant correlates included family involvement, income, number of disabilities, and age. Those who were successful had a higher assessed QOL Index than those who were unsuccessful.



Scheerenberger, R. C., & Felsenthal, D. (1977). Community settings for MR persons: Satisfaction and activities.

Mental Retardation, 15, 3-7.

HANDICAPPING CONDITION: MR_MO MR MI

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment variables include: clients' attitudes toward
community integration.

ABSTRACT:

Seventy-five former residents of a public residential facility were personally interviewed to determine their attitudes toward and impressions of living in the community as well as the degree to which their foster, group, or adult home conformed to the principle of normalization. Supplemental information concerning normalization among the community living facilities were provided by 15 trained interviewers.

Schwartz, S. E. (1980). Evaluation of the vocational preparation and success of handicapped individuals who reside in rural areas of Florida: A continuation report. Tallahassee: Florida State Department of Education and Vocational Education. (ERIC Document Reproduction Service N ED 195-671)

HANDICAPPING CONDITION:
DIS ORTHO DEAF MR_SP MR_MO MR_MI LD

PRIMARY FOCUS: EMPLOYMENT OUTCOME

Imployment outcomes measured were: employment status, occupational type, and previous employment status.

ABSTRACT :

This document reports Phase 1--the datagathering process--of a research project to study vocational preparation and adjustment of persons with handicaps in rural areas of the State of Following a discussion of the phase objectives (Chapter 1), Chapter 2 provides a review of current educational programs offering vocational 'occupational training to handicapped, secondary-level youth and adults in the nation and in Florida. Chapter 4 contains a pilot study of handicapped adult employment in a rural community which was intended to determine (1) the availability of jobs, (2) employer's opinions of handicapped adults as employees, (3) employment status of a number of adults with handicaps, and (4) relationship between vocational adjustment and educational history. The appendix includes descriptions of the national level and Florida programs reviewed.

REC # :

of the perceptions of high school and college faculties'
implications for program development for secondary
learning disabled students. Greenville, NY: Long
Island University Transition Project.

HANDICAPPING CONDITION:

PRIMARY FOCUS: EDUCATIONAL OUTCOME
The educational outcomes studied included five areas
of attitudes towards students with LD: practical
implications for the classroom, characteristics of
students with LD in terms of academic, social, and
quidance skills.

ABSTRACT:

The purpose of this study was to define the extent of the differences between high school and college faculty regarding the characteristics and preparatory needs of secondary students with LD. Two hundred eighty-eight high school teachers (246 regular and 42 special education) and 82 college teachers responded to a questionnaire addressing attitudinal and educational issues relating to the preparation of secondary students with LD. The results of the survey suggested that the perception of the special education and college teachers relating to the academic and social competencies needed by students with LD differed on issues relating to the characteristics and counseling needs of students with LD and on the goals and achievement outcomes of secondary preparation programs for students with LD.

REC # :

Seltzer, M. M. (1984). Patterns of job satisfaction among mentally retarded adults. Applied Research in Mental Retardation, 5, 147-159.

HANDICAPPING CONDITION: MR_SP MR_MO MR_NI

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment outcomes include: employment status, job
mobility, and satisfaction with tasks, supervision,
co-workers, pay, and promotions among others.

ABSTRACT :

This study examined the correlates of job satisfaction in a sample of 65 adults with mental retardation who had been released from a state institution nearly five years prior to the research. The sample members were divided into four groups on the basis of their job status and job mobility. In two of the groups, sample rembers were downwardly mobile. In the other two groups, they were either upwardly mobile or had maintained a stable employment status. It was found that the downwardly mobile sample members were much less satisfied with their jobs than were those who were not downwardly mobile. Other variables that were found to correlate with sample members' job satisfaction included the size of the work setting, the social skills and communication skills of the sample members, and the extent to which sample members were given feedback about their performance by their supervisors at work.

REC #:



Seltzer, M. M., Seltzer, G. B., & Sherwood, C. C. (1982).

Comparison of community adjustment of older vs. younger mentally retarded adults. American Journal of Mental Deficiency, 87(1), 9-13.

HANDICAPPING CONDITION: MR_SP MR_MO

PRIMARY FOCUS: INDEPENDENT LIVING STATUS
IL variables include: types of residences, community
living skills, and use of support services.

ABSTRACT:

The relationship between age and community adjustment was studied in a sample of 153 adults with mental retardation after their deinstitutionalization. Those aged 18 to 54 were compared with those aged 55 and older with respect to IQ, rate of recidivism, community adjustment, and residential environment. Results showed that although the two groups were comparable in IQ and recidivism rate, the older subjects lived in less autonomous residences in the community and functioned at a lower level. Alternative explanations for these results were offered, and policy implications were presented.

REC #:

Sitlington, P. L. (1986). Transition, special needs,

and vocational education. Columbus, OH: ERIC

Clearinghouse on Adult, Career, and Vocational Education.

HANDICAPPING CONDITION:
DIS BLIND MULTI VISU HI ORTHO DEAF SED MR_SP MR_MO
MR_MI SI LD

PRIMARY FOCUS: EDUCATIONAL OUTCOME
Educational outcomes measured include: job-related
academic skills, specific vocational skills, among
others.

ABSTRACT :

This paper (1) briefly reviews various recent studies of the vocational adjustment of youth with special needs; (2) identifies the types of skills needed for successful transition; (3) identifies the disciplines involved in the transition process they have to offer; (4) outlines possible roles that the field of vocational education might play in the transition process; and (5) discusses the implication of there roles. This study concludes that individuals with special needs usually find jobs through family or friends, and the employment of youth with special needs seem to stem from a lack of these types of skills: interpersonal skills, job-related skills, and specific vocational skills.

REC # :



Smith, M. (1986). <u>Supported employment for certain</u>

<u>severely handicapped persons</u>. Washington, DC: Education

and Public Welfare Division, Congressional Research

Service, The Library of Congress.

HANDICAPPING CONDITION: MR SP MR MO

PRIMARY FOCUS: EMPLOYMENT OUTCOME
This article focuses on supported employment.

ABSTRACT :

Supported employment services allow some persons with severe handicaps to earn wages in a regular work environment by providing the on-going help as needed to maintain the person in the job. This paper summarizes proposed amendments to the Rehabilitation Act related to this issue, compares different supported employment approaches, presents data from selected demonstration projects, and summarizes some of the potential benefits and limitations of this approach.

REC # :



Stodden, R., Meehan, K., Hodell, S., Rissoner, S., & Cabege, S. (1986). <u>Vocational assessment research</u>

project: A report of findings for project year 1985-86,

Status study results. Manoa, HI: Department of Special

Education, University of Hawaii.

HANDICAPPING CONDITION: VISU ORTHO DEAF MR_SP MR_MO MR_MI SI LD

PRIMARY FOCUS: EDUCATIONAL OUTCOME
Educational outcomes studied include: the similarities
between vocational assessment information and IEP
goals, classroom programming and work-study placement
decisions among others. Performance is also considered.

ABSTRACT:

This report presents the results of the investigations of the first year of the Vocational Assessment Research Project with respect to the impact of vocational assessment information upon the critical programming decisions involved in the vocational education of secondary school students with handicaps. A random sample of 127 students was selected from a total population of 1137 students in special education classes, 15 to 20 years of age. The educational records of these students were examined and all information pertaining to vocational assessment, IEP planning and content, classroom lesson plans and activities, and work-study placements and objectives was collected. In general, there was little relationship between information collected through vocational assessment and the presence of information in similar categories in the IEP, in classroom lesson plans, and in work-study placements and goals. The major factor contributing to this lack of relationship was the lack of variability among IEP goals and objectives within schools.



Stodden, R. A., & Browder, P. M. (1986). Community based competitive employment preparation of developmentally disabled persons: A program description and evaluation. Education and Training of the Mentally Retarded, 21(1), 43-53.

HANDICAPPING CONDITION: MR_SP MR_MO MR_MI LD

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment outcomes measured include: occupational
type, hourly wage, monthly income, hours worked per
week, percentage of trainees placed in competitive
positions, employer-feedback, and reasons for successful
employment and unemployment.

ABSTRACT :

The integration of large harbers of persons with disabilities within the mainstream of society has furthered the development of several community based employment preparation programs. Community based training efforts are demonstrating that the work of individuals with developmental disabilities compares well with the work of their peers without handicaps. Factors contributing toward successful participation within competitive employment settings are specified for the areas (a) training approach and methodology, (b) program management, and (c) trainee characteristics. Feedback from employers provides a basis for defining the strengths and needs of persons with developmental disabilities within work environments.

Sutter, P., Mayeda, T., Yanagi, G., & Yee, S. (1980).

Comparisons of successful and unsuccessful

community-placed mentally retarded persons. American

Journal of Mental Deficiency, 85(3), 262-270.

HANDICAPPING CONDITION: MR_SP MR_MO MR MI

PRIMARY FOCUS: INDEPENDENT LIVING STATUS
Rates of success and failure were given for various
levels of related demographic variables.

ABSTRACT :

Differences in the characteristics of unsuccessful and successful community-placed clients were examined. Discriminant function analysis identified a maladaptive behavior factor and gender to be significant discriminators between the two groups. Unsuccessful clients manifested a significantly higher frequency of every maladaptive behavior assessed by the maladaptive variable. More males than females failed in community placement.



REC #:

Szymula, G., & Schleser, R. C. (1986). A reappraisal of vocational evaluation from an ecological systems perspective. Rehabilitation Literature, 47, 224-229.

HANDICAPPING CONDITION:

PRIMARY FOCUS: EMPLOYMENT OUTCOME
This study focuses on vocational evaluation.

ABSTRACT :

Vocational evaluation has a foundation in the traditional psychological approach with emphasis on the clinical model. This has resulted in a primary focus on individual issues such as attitude and motivation and has led to the neglect of ecological concerns such as hiring practices or social-economic policies, which may lead to occupational disabilities.

This article presents a critical review of vocational evaluation from an ecological systems perspective. The intent was an integration of both areas leading to a new model of the vocational assessment process. A description of traditional practices of vocational evaluation was followed by an overview of emerging system approaches. Issues of environmental resources are discussed along with potential alternatives and systematic tactics for application.



Tarr, R. P., & Lewis, J. P. (1977). 1974-76 follow-up of the physically handicapped in Pennsylvania. University Park: Research Coordinating Unit for Vocational Education, Pennsylvania Department of Education. (ERIC Document Reproduction Service No. ED 014-570)

HANDICAPPING CONDITION: BLIND MULTI ORTHO DEAF SI

PRIMARY FOCUS: EMPLOYMENT OUTCOME
The following conditions were examined: the current
vocational status, the vocational education programs,
parental attitudes, employer attitudes, and types
of special services.

ABSTRACT :

This article examined selective aspects of the vocational education program, adjustments, and present status of the vocational graduate with physical handicaps in Pennsylvania from 1974-1976 and the views of the employers and parents toward the training of the graduates. Three major outcomes were reported: about three-fourths of the vocational students with handicaps were placed in regular occupational classes with students who were not handicapped; in most cases occupational training was not related to the first job; and about 93% of the employers of the physically handicapped reported that they would consider hiring another worker with physical handicaps.

REC # :



Thomson, T. L., & Lucas, J. A. (1981). Follow-up study

of former hearing impaired students at Harper College,

1977-1980. Palatine, IL: Office of Planning and Research.

(ERIC Document Reproduction Service No. ED 217 923)

HANDICAPPING CONDITION: DEAF

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment variables include: employment opportunities
for unskilled, paraprofessional or professional jobs, work
location, and full-time or part-time work.

ABSTRACT :

In March 1981, a follow-up study of former students with hearing impairments was conducted at William Rainey Harper College (WRHC) to gather employment and educational information and to evaluate the educational experience of these students at WRHC. The target population consisted of 117 students with hearing impairments who completed their education at WRHC between 1977 and 1980. Study findings, based on a 61% response rate, included the following: 1) 64% of the former students were employed full time, 13% were enrolled full time at another college, and 18.5% were unemployed; 2) about 37% of the respondents had continued their education at some time after leaving WRHC; 3) some 60% of those working were in skilled, paraprofessional, or professional jobs; 4) over 39% of the former students were in jobs or educational programs related to their major field at WRHC; 5) respondents felt that the college was more successful in helping students to communicate latter and get along with people than in teaching specific job skills or knowledge; respondents stated their goals at WRHC were to communicate, gain social confidence, improve their skills, and become better students; 7) the majority of baccalaureate-oriented students rated WRHC highly in helying them prepare for transfer. The survey report provides detailed data tables and includes students' comments. The survey instrument is appended.

REC #:



Tindall, L. W., Gugerty, J. J., Dougherty, B. B., & Heffron,

T. J. (1987). Replicating jobs in business and industry for persons with disabilities, (Vol. 2.). Madison:

Vocational Studies Center, University of Wisconsin.

HANDICAPPING CONDITION:
MULTI VISU HI ORTHO DEAF SED MR_SP MR_MO MR_MI SI
LD

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Educational variables include: company information,
job requirements, job information, significant duties,
and special considerations.

ABSTRACT:

This publication provides information about jobs performed in business and industry by persons with disabilities. Each job description specifies the type of job, disability of the person performing the job, company information, job requirements, job information, significant duties, and special considerations. The information on each job description in this catalog was provided by employers, persons who are disabled, job placement specialists and other interested persons. Potential users of this catalog include persons with disabilities, special educators, vocational instructors, rehabilitation counselors, job placement and job development counselors, employers and others.

REC #:



Trachtman, R. (1986). School/Business collaborations:

Their impact on teachers. San Francisco, CA: American Educational Research Association.

HANDICAPPING CONDITION:
DIS BLIND MULTI VISU HI ORTHO DEAF SED MR_SP MR_MO
MR_MI SI LD

PRIMARY FOCUS: EDUCATIONAL OUTCOME
Educational variables include the nature and extent
of school business partnerships.

ABSTRACT:

This nationwide in-depth telephone study was designed and implemented during the first 6 months of 1985 in order to examine both the process and product of school-business interactions. The superintendent, a school board member, a teacher organization leader, and a teacher were interviewed in each of 85 randomly selected school districts across the U.S. It was found that although the number of business-school partnerships is on the rise, business has not attempted to fill in the gaps left by cuts in Federal spending. The interactions occur most frequently in vocational classes where the emphasis is on developing "employability skills." School-business interactions are initiated most frequently as a result of the interest and resourcefulness of an individual teacher.

REC # :



Tracy, K. M. (1979). Job skill training, placement
and follow-up of rehabilitation clients in Utah sheltered
workshops. Salt Lake City: Utah State Board for
Vocational Education. (ERIC Document Reproduction
Service No. ED 181-229)

HANDICAPPING CONDITION:
VISU ORTHO DEAF SED MR_SP MR_MO MR_MI SI LD

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment outcomes include: number of job placements
relating to skill training, number of clients still on
job, occupational type, and job satisfaction and
dissatisfaction.

ABSTRACT:

This study investigated skill training, job placement, and follow-up services for the individuals who are vocationally handicapped and utilizing sheltered workshops in Utah. Two questionnaires were developed. All but one workshop responded, providing information on 1047 clients. The rate of response for clients was 45%. Findings show 47% of clients in work activity or work adjustment modes. The three most active and productive areas, in descending order, were trade and industrial, distributive, and health occupations training and placement. clients were placed in a job relating to their skill training area and most were still on the job. Recommendations include teacher training for coping with the handicapped in the mainstream and in-depth studies of client follow-up services to placed clients, employees, and parents or quardians.

REC #:



Trybus, R. J., & Archmer, M. A. (1977). School achievement scores of hearing impaired children: National data on achievement status and growth patterns. American Annals of the Deaf Directory of Programs and Services, 122, 62-69.

HANDICAPPING CONDITION: DEAF

PRIMARY FOCUS: EDUCATIONAL OUTCOME
Academic achievement variables include: mathematics
computation and reading comprehension.

ABSTRACT:

This paper reviews two sets of national data from the 1974 program of the Stanford Achievement Test on children with hearing impairments. One thousand four hundred and forty-three children with hearing impairments were tested in 1971 and again in 1974 on math computation and reading comprehension. The overall mean 3-year gain is 0.8 grade equivalents, or slightly less than 0.3 grade equivalents per year. Furthermore, variables besides age, such as sex, ethnic group, degree of hearing loss, presence of additional handicapping conditions, age child began school, and parents' deafness have substantial effects on academic achievement.

REC #:



Uno, T., & Petty, C. (1979). 1971-1977: Graduates

of the model secondary school for the deaf. Washington,

DC: Department of Health, Education, & Welfare. (ERIC

Document Reproduction Service No. ED 203-620)

HANDICAPPING CONDITION: DEAF

PRIMARY FOCUS: EDUCATIONAL OUTCOME
Educational variables include: evaluations of personnel,
program services & instructional courses; post-secondary
education experience, post-school adjustment.

ABSTRACT:

A survey of 105 graduaces of the Model Secondary School for the Deaf (MSSD) from 1971 to 1977 was conducted. Although the majority of the graduates were single, earlier classes tended to have greater numbers of married graduates than the more recent classes of 1976 and 1977. Approximately 70% have attended or are now attending postsecondary educational programs, and 14 were employed while 9% were not. The reactions of the graduates to MSSD were largely positive, particularly to the services provided by countelors, advisors, and teachers. Students indicated the need for developing better study skills and for putting greater emphasis on reading and writing. Students rated the courses offered by MSSD.



Vandergoot, D. (1985). The transition from school
to work of youth with disabilities. Unpublished
manuscript, Human Resources Center, New York, NY.

HANDICAPPING CONDITION:
DIS BLIND MULTI VISU HI ORTHO DEAF SED MR_SP MR_MO
MR_MI SI LD

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Labor market achievement for those with disabilities
including unemployment and wages.

ABSTRACT :

This is a literature review on employment achievement for the youth with disabilities. The author in this paper reports on the reasons why the labor market achievement for those with disabilities is considerably less than for those without disabilities and presents some information concerning the variety of interventions. The intervention categories used in this literature review include: work experience programs, work skills preparation employer focused initiatives, rehabilitation engineering, community resource utilization, occupational information, job seeking skills preparation, transition planning.

REC #:

Vetter-Zemitzsch, A. A. (1983). A comparison of the characteristics of learning disabled and non-learning disabled young adults. <u>Dissertation Abstracts</u>

<u>International</u>, 3359A-3360A. (University Microfilms No. 84-03,627)

HANDICAPPING CONDITION:

PRIMARY FOCUS: EDUCATIONAL OUTCOME
Numerous educational variables were studied. Included
among the list are happiness with junior/senior high
school education and levels of difficulty experienced
in specific subject areas in high school.

ABSTRACT :

Professionals in the field are discovering that learning disabilities persist into adolescence and adulthood despite the programming efforts in school. The characteristics of the adult population with learning disabilities and important environmental factors such as family background, past interventions and vocational status need to be analyzed.

This study investigates a group of 65 young adults who had been identified as learning disabled in high school. The group was compared to a group of 64 young adults without learning disabilities matched in terms of age, sex, and high school district of attendance. The groups had been out of high school from two to seven years.

The research was based primarily on questionnaire responses completed by all subjects, individual interviews, a Q-sort and a semantic differential. Differences were found between the LD and NLD groups in all areas assessed. This information will begin to help clarify the long-term effects of learning disabilities.

REC #: 114

ERIC AFUITEM PROVIDES OF SERIES

Vogel, H. D. (1975). A follow-up study of former student-patients at the Crippled Children's Hospital and School, Sioux Falls, South Dakota. Rehabilitation <u>Literature</u>, <u>36</u>, 270-273.

HANDICAPPING CONDITION: ORTHO

PRIMARY FOCUS: EMPLOYMENT OUTCOME Occupational status of former student-patients: 1) nonproductive 2) students 3) employed. Physical, educational, and social status.

ABSTRACT :

A follow-up study of 252 former students with physical handicaps from a state residential treatment center was undertaken to examine their occupational, educational, physical, and social status after having left the center. Data from 164 returned questionnaires indicated that subjects could be categorized into three groups: nonproductive, student, and employed. Tabulation of percentages revealed that the non-productive group was more likely to have cerebral palsy and to be living at home with their parents. They were less mobile and less likely to be able to perform certain personal care tasks. They were less intelligent and had achieved a lower lavel of education. They participated less in social activities and were less likely to marry.



Vogelsberg, T. R., Ashe, W., & Williams, W. (1984).

Community based service delivery in rural Vermont:

Issues and recommendations. In R. Horner, L. M., Voeltz,

& B. Fredericks (Eds.), Education of learners with

severe handicaps: Exemplary service strategies.

Baltimore, MD: Paul H. Brookes.

HANDICAPPING CONDITION: MR_SP MR_MO

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment variables studied include percentage of
job placements, hourly and monthly wages, occupational
type, and percentage of individuals still working,
among others.

ABSTRACT :

The competitive employment programs in Vermont were initiated to improve the quality and variety of employment services available to individuals with severe handicaps in the State of Vermont. They are small programs, require limited financial resources, and have assisted in the development of competitive employment opportunities for approximately 12-15 individuals each year in each location.

The authors found that the frequent reason given for lack of improvement of quality of services is lack of resources and inadequate staff to trainee ratios. They concluded careful analysis of the service design, development of large group instruction for some individuals while others receive more intensive instruction, and effective utilization of parents and volunteers can frequently alter the service design and staff ratios.

Wacker, D. P., Kerr, N. J., & Carroll, J. L. (193).

Discrimination skill as a predictor of prevocational performance of institutionalized mentally retarded clie ts. Rehabilitation Psychology, 28(1), 45-59.

HANDICAPPING CONDITION: MR_SP MR MO

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment variables include discrimination skills of
clients, as well as prevocational performance.

ABSTRACT :

Two experiments were conducted to determine whether an assessment of the discrimination skills of clients with mental retardation who have been institutionalized provided information regarding subsequent prevocational performance. During Experiment 1, the two-choice discrimination skills of 20 clients with mental retardation were assessed with six diagnostic tasks. Following assersment, 12 clients were administered several criterion tasks to determine the accuracy of prediction of assessment tasks on prevocational analogue tasks. During Experiment 2, nine clients were administered a prevocational sorting task, and the accuracy of prediction of the discrimination assessment was again evaluated. Results indicated that the results of assessment are useful in predicting performance across most of the analogue tasks and the prevocational sorting task.



Weatherman, R. F., Stevens L. J., & Krantz, G. C. (1986).

Current practice and models in transition programming in passages to careers: A framework for transition policy for mildly handicapped young adults. St. Paul: University of Minnesota, Department of Vocational and Technical Education and Department of Educational Psychology.

HANDICAPPING CONDITION: VISU ORTHO DEAF SED MR_SP MR MO MR MI LD

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Outcome variables include employment rates and turnover,
types of employment, wages and benefits, job satisfaction,
and methods used to find jobs, among others.

ABSTRACT :

Current practices, problems, studies, and models in transition programming are reviewed. An Oregon study identifies seven major problem areas. Recent Federal and state initiatives that address some of the recent problem areas were discussed. The OSERS, Brown, and Wehman models of transition programming for young adults with mild to severe handicaps are described. These models emphasize transition from high school and post-secondary education. Partial results of recent follow-up studies on vocational outcomes of youth with handicaps are summarized. General trends across studies in the areas of study methodology and subject characteristics, employment, gender, graduation status, wages and benefits, methods used to find jobs, and job satisfaction are noted. For example, all studies reported significantly higher employment rates for males than for females. Also based on the follow-up studies are suggestions for improvements in research and program development. One study reported that school personnel responsible for students with mild handicaps in rural areas, for the most part had no follow-up records for students who had been in special education classes. Other areas in need of improvement include: parent involvement, personnel preparation, and interagency coordination.



Wehman, P., Hill, M., Goodall, D., Cleveland, P.,
Brooke, V., & Pentecost, H. Jr. (1982). Job placement
and follow-up of moderately and severely handicapped
individuals after three years. The Journal of the

Association for the Severely Handicapped, 10, 5-16.

HANDICAPPING CONDITION: MULTI MR SP MR MO

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Placement rates, retention rates, wages, absenteeism,
nature of jobs.

ABSTRACT:

This paper describes the results of a three-year job placement project for individuals with moderate and severe handicaps in Virginia. This project developed a training and advocacy approach to placement that involved client training by staff at the job site. Staff advocacy also took place with co-workers and employers. clients were paid by employers as part of the regular work force. Although the project is still ongoing as it seeks to replicate training and placement procedures throughout Virginia, at the three-year point, 63 clients have been placed, with 42 currently working, for a ratention rate of These individuals have collectively earned \$265,000 and paid well over \$26,000 in state and Federal taxes. Moreover, most of these clients had long records of exclusion from nonsheltered and even sheltered work, since they were viewed by professionals and parents as "realistically unemployable." This report highlights the major characteristics and conclusions drawn from staff efforts to this point.

REC # :



Wehman, P., Hill, M., Hill, J., Brooke, V., Pendleton, P., & Britt, C. (1985). Competitive employment for persons with mental retardation: A follow-up six years later. Mental Retardation, 23, 274-281.

HANDICAPPING CONDITION: MR_SP MR_MO MR_MI

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Job placement, job retention, income, includes mean
length of time nonhandicapped workers stay in similar
or identical industries.

ABSTRACT :

This paper describes the job placement and retention of individuals with mental retardation who have been working competitively over a six-year period. A total of 167 clients with a median level measured intelligence of 49 have been placed into unsubsidized competitive employment. A supported work model of competitive employment was utilized which featured structured placement, job site training by staff, and ongoing followalong through the full period of the client's employment. Over \$1 million has been earned through the six-year period by participating clients. The average length of time on the job for all clients has been 19 months; for most clients this was their first real job. series of policy recommendations are proposed to make community services more responsive to the potential of people with retardation to work competitively. It is clear more longitudinal studies of this nature need to be undertaken.

Wehman, P., Kregel, J., & Seyfarth, J. (1985). Transition from school to work for individuals with severe handicaps:

A follow-up study. The Journal of the Association

for the Severely Handicapped, 10, 132-136.

HANDICAPPING CONDITION: MR SP MR MO

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Level of employment, type of employment, transportation to
job site, length of employment, wages, fringe benefits,
assistance in obtaining job, reasons for lack of
employment and job termination, level of services received
from vocational rehabilitation and local mental
retardation services.

ABSTRACT :

This study assessed the employment status of 117 transition age young adults with moderate, severe or profound mental retardation in Virginia. Data were collected by trained interviewers on variables related to employment level, wages earned, types of jobs, assistance available in job identification, and so forth. The findings indicated high unemployment rates of almost 88% with only 14 of the 117 persons holding competitive jobs in non-sheltered work environments. Wage accumulation was very limited. Implications of these results and other similar studies for future programming are then discussed.

Wehman, P., Kregel, J., & Seyfarth, J. (1985). Employment outlook for young adults with mental retardation.

Rehabilitation Counseling Bulletin, 29, 90-99.

HANDICAPPING CONDITION: MR_SP MR_MO MR MI

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Employment status, method of job obtainment, income,
unemployment rates, type of job, reason for job
separation.

ABSTRACT:

A total of 300 parents of young adults with mental retardation were interviewed in Virginia. These young adults had left special education school programs between 1979 and 1983. Of these young adults, 60% were labeled educable mentally retarded, and 40% were considered trainable or severely mentally retarded. The intent of this study was to assess the employment status of these persons. The results indicated that the total unemployment rate was 58%, almost three-fourths of those who were employed earned less than \$500 per month, most individuals had never used professional job placement services, and those who were employed had obtained their jobs through family members or friends. It was concluded that school and adult programs need to emphasize much more work in community-based instruction and job placement. Formal transition planning is essential.

Wehman, P., & Schleien, S. (1980). Assessment and selection of leisure skills for severely handicapped individuals.

<u>Education and Training of the Mentally Retarded</u>, <u>15</u>, 50-57.

HANDICAPPING CONDITION: SED MR SP

PRIMARY FOCUS: INDEPENDENT LIVING STATUS
The areas of leisure skill assessment examined in
the article are skill proficiency, duration of activity,
physical characteristics, and access to materials
and events, among others.

ABSTRACT:

The purpose of this article is to describe several types of leisure skill competency areas which can be assessed in individuals with severe handicaps. These include proficiency with skill related objects and materials, the length of self-initiated action, and others. Criteria were also identified for selecting leisure skills. Client preference, functioning level, and support of the home environment are among the principal criteria discussed. The authors state that there are not any published or unpublished leisure skill inventories on criterion-referenced curriculum quides which are sensitive to the unique needs and problems of persons with severe and profound handicaps. Therefore, what is needed is development, field-testing, and validation of these types of curricula.

REC #:



Whang, P., Suarez D. B., & Fawcett, S. (1982). <u>Disabled</u>

<u>citizens concerns report for Independence, Inc., consumer</u>

<u>advisory committee</u> (Monograph 13-A). Lawrence:

The Research & Training Center on Independent Living,

University of Kansas.

HANDICAPPING CONDITION:

PRIMARY FOCUS: INDEPENDENT LIVING STATUS
Independent living measures include mean satisfaction
and importance ratings of various types of services,
such as counseling, advocacy activities, housing,
and transportation among others.

ABSTRACT:

The Concerns Report method is a systematic process used to identify the strength and problems of a community or organization, as identified by citizens with disabilities. This paper describes the use and results of this method used in Independence, Inc., an independent living center located in Lawrence, Kansas. A survey was given to ten consumers of the center's services. of the center's strengths that were identified include: (1) the center is involved in advocacy activities for individuals, and (2) the center's transportation services are reliable. Some of the recommended solutions to identified problems include: (1) consumer advisory committee members should provide more social support for advocacy activities, and 2) members with disabilities should communicate more with the staff. Overall, the agency received a 75% satisfaction rating. The paper also includes results of a public meeting where eight consumers analyzed the center's problems and their solutions. A copy of the survey is also included.

REC # :



Whang, P. L., Fawcett, S. B., & Mathews, R. M. (1984).

Teaching job related social skills to learning disabled adolescents. Analysis and Intervention in Developmental Disabilities, 4, 28-29.

HANDICAPPING CONDITION:

PRIMARY FOCUS: EMPLOYMENT OUTCOME Employment variables include observation of job related social skills and employer ratings.

ABSTRACT:

Little information is available on the use of social skills by persons with disabilities in work settings. Positive styles of interaction in the workplace might include the job-related social skills of explaining a problem to a supervisor, providing constructive criticism, accepting criticism, accepting a compliment, accepting an instruction, and providing a compliment. The effects of training procedures for these social skills were evaluated with two adolescents with learning disabilities. The results showed the procedures to be effective in increasing the level of job-related social skills performed by the participants in analogue situations. Direct observations of performance taken at the adolescents' places of employment suggest some generalization of training effects to actual work environments.

REC #:

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White, W. J., Alley, G. R., Deshler, D. D., Schumaker, J. B., Warner, M. W., & Clark, F. L. (1982). Are there learning disabilities after high school? Exceptional Children, 49, 273-74.

HANDICAPPING CONDITION:

PRIMARY FOCUS: EMPLOYMENT OUTCOME Employment status, job status, job satisfaction.

ABSTRACT:

This study was designed to address the adult adjustment of young adults with learning disabilities and those without learning disabilities. One hundred and eight subjects, mean age=20, were questioned about their vocational adjustment, social-personal adjustment, community adjustment, medical status, and education. Though young adults with LD are comparable to persons without disabilities in a number of important areas, it can be concluded that they seem to be much less satisfied with some areas of their lives. A recommendation for the schools to provide students who are LD with training for adult adjustment is made.

Wilson, R. J., & Rasch, J. D. (1982). The relationship of job characteristics to successful placements for psychiatrically handicapped. <u>Journal of Applied</u>

<u>Rehabilitation Counseling</u>, 13, 30-33.

HANDICAPPING CONDITION: SED

PRIMARY FOCUS: EMPLOYMENT OUTCOME
30b maintenance in competitive employment, job aptitude.

ABSTRACT :

This study investigated the relationship of job maintenance to select characteristics of competitive jobs held by 53 people with psychiatric handicaps who had participated in a psychosocial rehabilitation program. The results indicated that the longest placements generally involved more significant relationships with things (sixth digit of the Dictionary of Occupational Titles code). Specific vocational preparation requirements of placements were also somewhat higher in longer maintained jobs. It was found that strength requirements, general educational development and average aptitude requirements were not strongly related to job maintenance.

Wolfe, B. L. (1979). <u>Impacts of disability and some</u>

<u>policy implications</u>. Madison: University of Wisconsin,

Institute for Research on Poverty. (ERIC Document

Reproduction Service No. ED 175 956)

HANDICAPPING CONDITION:

PRIMARY FOCUS: EMPLOYMENT OUTCOME
Work limitations, income, labor force participation,
wage rates, poverty status, transfer payments.

ABSTRACT:

Using data from the 1977 Current Population Survey, this paper examines the impacts of disability on wages, labor force participation, education, and marital status. Taken into consideration are the definitions applied those with disabilities, characteristics shared by those who are disabled, and the participation of this group in public and private transfer payment programs. Also considered are race, age, and sex variables and the implications of regional differences. Findings indicate that people with disabilities are likely to have less education, lower wages, work fewer hours, less likely to have employment, less likely to be married, and more likely to be below the poverty line, even when receiving payments in transfer programs, than people without disabilities. Findings also indicate that those who are nonwhite and/or female are even further disadvantaged. It is concluded that better transfer payment programs and/or education and training programs may be needed to alleviate the conditions of those with disabilities and reduce the poverty population.

REC #:



Wolk, S., & Allen, T. E. (1984). A 5-year follow-up of reading-comprehension achievement of hearing-impaired students in special education programs. <u>Journal of Special Education</u>, 18, 161-176.

HANDICAPPING CONDITION: HI ORTHO DEAF LD

PRIMARY FOCUS: EDUCATIONAL OUTCOME Growth in reading comprehension over a 5-year period.

ABSTRACT :

Reading comprehension was assessed in 1974 and again in 1979 for 1,664 students with hearing impairments enrolled in special education programs across the United States. The Special Edition for Hearing Impaired Students of the 1973 Stanford Achievement Test, an adaptation of the regular edition of the Stanford but with identical items and subtest structure, was used to assess students' achievement both years. The major research question concerned the relative importance for achievement growth of the most salient handicapping characteristics of the population (specifically, the degree of hearing loss and the presence of any additional, educationally significant handicaps) compared with basic student demographic characteristics, such as race, age, and sex. A repeated-measures statistical analysis of the data indicated that the growth in reading achievement of the typical student with hearing-impairments over a 5-year period was approximately one-third that of the average student without hearing impairments. addition, degree of hearing loss, age, and racial background had significant effects on reading-comprehension growth.

REC #:



Wright, P., & Santa Cruz, R. (1983). Ethnic compositions of special education programs in California. <u>Learning</u>

<u>Disability Ouarter.y</u>, 6(4), 387-394.

HANDICAPPING CONDITION: SED MR SP MR MO MR MI SI LD

PRIMARY FOCUS: EDUCATIONAL OUTCOME
Educational variables included incidence rates of
racial/ethnic groups in special education subpopulations,
and percentages of each group in total population
of each SELPA among others.

ABSTRACT :

The purpose of this study was to investigate the racial composition of mental retardation (MR), speech impairment (SPEECH), serious emotional disturbance (SED), and specific learning disability (SLD) classes in California during The basic unit of analysis was 96 Special Education Local Planning Areas (SELPAs) representing all school districts in the state. Using the criteria established by the court in the Diana and Larry P. cases, findings indicate that Hispanic students continue to be overrepresented in approximately one-fourth of the SELPAs in MR, SPEECH, and SLD programs. Black students are overrepresented in MR and SPEECH programs in approximately one-fourth of the SELPAs, and in nearly two-thirds of the SELPAs in SLD programs. Minority students are overrepresented in SLD programs more frequently than in other program types.

REC #:



Zigmond, N., Thornton, H., & Kohnke, R. L. (1986).

<u>Predictors of high school dropout in urban LD and</u>

<u>NLD youth</u>. Paper presented at the American Education

Rehabilitation Annual Conference, San Francisco, CA.

HANDICAPPING CONDITION:

PRIMARY FOCUS: EDUCATIONAL OUTCOME
Family background individual characteristics, and
school experience are positively related to the dropout
rate.

ABSTRACT :

This study examines the relative predictive utility of factors believed to be related to school drop out. Data were derived from interviews and school record searches completed on two samples of high school students, learning disabled (LD) and non-learning disabled non-handicapped peers (NLD), who had attended ninth grade in a large northeastern urban school district and had either completed high school or had dropped out of school. Findings indicate that students, both LD and NLD at risk for dropping out, may be identifiable with considerable accuracy much earlier than at entrance into high school using information readily available to school personnel. Implications for further research are discussed.

REC #:

.8.



Annotated Bibliography

Zollers, N., Conroy, J., Hess, C., & Newman, E. (1984).

Transition from school to work, a study of young adults and their families in Pennsylvania. Unpublished Manuscript, Temple University, Philadelphia.

HANDICAPPING CONDITION: BLIND SED MR SP

PRIMARY FOCUS: EMPLOYMENT OUTCOME Current employment status, satisfaction with placement, and adult service system.

ABSTRACT :

This paper explores the adult service system "crisis" for graduates with disabilities as they leave school. The roles of the school and the family are described. The Pennsylvania Transition Study's purpose is to determine exactly what happens once the students have "aged out" of eligibility for free education. Interviews were conducted with the graduates and their families. Questions on employment status, independent living status, satisfaction with school preparation, and general questions on the transition experience were covered. Findings confirmed three problem areas: 1) inadequate school preparation, 2) inappropriate and inadequate post-school services, and 3) little attention to transition of disabled students from school to work. Recommendations for state and Federal policy are included.

References

- Ashton-Tate Publishing Group. (1984). Read me first: dBASE III (Version 1.1). Torrence: CA: Author.
- Louis Harris & Associates, Inc. (1986). The ICD survey of disabled Americans: Bringing disabiled Americans into the mainstream: A nationwide survey of 1,000 disabled people. New York: Authors.
- Harnisch, D. L., Chaplin, C. C., Fisher, A. T., & Tu, J. J. (1986). <u>Transtion literature review on educational</u>, <u>employment, and independent living outcomes</u>. Champaign, IL: The Transition Institute at Illing 3.
- Hart, G. (1986, July). Power add-ons for dBASE. <u>PC Magazine</u>, pp. 267-282.
- Will, M. (1983). OSERS programming for the transition of youth with disabilities: Bridges from school to working life.
 Washington, DC: Office of Special Education and Rehabilitative Services.



APPENDIX A

Definitions of Handicapping Conditions

From P.L. 94-142:

- (a) As used in this part, the term "handicapped children" means those children evaluated in accordance with 121a.530-121a.534 as being mentally retarded, hard of hearing, deaf, speech impaired, visually handicapped, seriously emotionally disturbed, orthopedically impaired, other health impaired, deaf-blind, multihandicapped, or as having specific learning disabilities, who because of those impairments need special education and related services.
 - (b) The terms used in this definition are defined as follows:
- (1) "Deaf" means a hearing impairment which is so severe that the child is impaired in processing linguistic information through hearing, with or without amplification, which adversely affects educational performance.
- (2) "Deaf-blind" means concomitant hearing and visual impairments, the combination of which causes such severe communication and other developmental and educational problems that they cannot be accommodated in special education programs solely for deaf or blind children.
- (3)"Hard of hearing" means a hearing impairment, whether permanent or fluctuating, which adversely affects a child's educational performance but which is not included under the definition of "deaf" in this section.
- (4) "Mentally retarded" means significantly subaverage general intellectual functioning existing concurrently with deficits in adaptive behavior and manifested during the developmental period, which adversely affects a child's educational performance.
- (5) "Multihandicapped" means concomitant impairments (such as mentally retarded-blind, mentally retarded-orthopedically impaired, etc.), the combination of which causes such severe educational problems that they cannot be accommodated in special educational programs solely for one of the impairments. The term does not include deaf-blind children.
- (6) "Orthopedically impaired" means a severe orthopedic impairment which adversely affects a child's educational performance. The term includes impairments caused by congenital anomaly (e.g., clubfoot, absence of some member, etc.), impairments caused by disease (e.g., poliomyelitis, bone tuberculosis, etc.), and impairments from other causes (e.g., cerebral palsy, amputations, and fractures or burns which cause contractures).
- (7) "Other health impaired" means limited strength, vitality or alertness, due to a chronic or acute health problems such as a heart condition, tuberculosis, rheumatic fever, nephritis, asthma, sickle cell anemia, hemophilia, epilepsy, lead poisoning, leukemia, or diabetes, which adversely affects a child's educational performance.



(8) "Seriously emotionally disturbed" is defined as follows:

(i) The term means a condition exhibiting one or more of the following characteristics over a long period of time and to a marked degree, which adversely affects educational performance:

(A) An inability to learn which cannot be explained by

intellectual, sensory, or health factors;

(B) An inability to build or maintain satisfactory interpersonal relationships with peers and teachers;

(C) Inappropriate types of behavior or feelings under normal

circumstances;

(D) A general pervasive mood of unhappiness or depression; or

(E) A tendency to develop physical symptoms or fears associated

with personal or school problems.

- (ii) The term includes children who are schizophrenic or The term does not include children who are socially autistic. maladjusted, unless it is determined that they are seriously emotionally disturbed.
- (9) "Specific learning disability" means a disorder in one or of the basic psychological processes involved in understanding or in using language, spoken or written, which may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations. The term includes such conditions as perceptual handicaps, brain injury, minimal brain disfunction, dyslexia, and developmental aphasia. The term does not include children who have learning problems which are primarily the result of visual, hearing, or motor handicaps, of mental retardation, or of environmental, cultural, or economic disadvantage.

(10) "Speech impaired" means a communication disorder, such as stuttering, impaired articulation, a language impairment, or a voice impairment, which adversely affects a child's educational

performance.

(11) "Visually handicapped" means a visual impairment which, even with correction, adversely affects a child's educational performance. The term includes both partially seeing and blind children.

Burgdorf, R. Jr., (Ed.). (1980). The legal rights of handicapped persons: Cases, materials and text (pp. 135-136). Paul H. Brooks, Pub.



Appendix B

References for Educational Outcomes

- Benz, M. R., & Halpern, A. S. (1987). Transition services
 for secondary students with mild disabilities: A statewide
 perspective. The Council for Exceptional Children,
 53(6), 507-514. [Record # 162 (p.125]
- Bernal, E. M. (1983). Trends in bilingual special education.

 <u>Learning Disability Quarterly</u>, <u>6</u>(4), 424-431. [Record #142 (p.126)]
- Bourbeau, P. E., Sowers, J., & Close, D. W. (1986).

 An experimental analysis of generalization of banking skills from classroom to bank settings in the community.

 Education and Training of the Mentally Retarded,
 98-106. [Record # 166 (p.129)]
- Boyce, D. A., & Elzey, F. (1978). A study of the vocational adequacy of former special education students following high school graduation. Sacramento, CA: California State Dept. of Education. (ERIC Document Reproduction Service No. ED 163 668). [Record # 15 (p.133)]
- Brolin, D. E., & D'Alonzo, B. J. (1979). Article issues in career education for handicapped students. <u>Exceptional Children</u>, 45(4), 246-253. [Record # 156 (p.137)]
- Brosnan, F. L. (1983). Overrepresentation of low socioeconomic minority students in special education programs in California. <u>Learning Disability Quarterly</u>, <u>6</u>(4), 517-525. [Record # 141 (p.140)]
- Brown, L., Pumpian, I., Baumgart, D., & Vandeventer, P., et al. (1981). Longitudinal transition plans in programs for severely handicapped students. Exceptional Children, 47(8), 624-631. [Record # 93 (p.140)]
- Cobb, M., & Crump, W. (1984). Post-school status of young adults identified as learning disabled while enrolled in public schools: A comparison of those enrolled and those not enrolled in learning disabilities programs. Washington, DC: Division of Educational Services, Special Education Programs. (ERIC Document Reproduction Service No. ED 253 029) [Record # 1 (p.145)]
- Coleman, J. S., Hoffer, T., & Kilgorf, S. (1982). <u>High</u>
 <u>school achievement: Public, catholic, and private</u>
 <u>schools compared</u>, (pp. 46-48), New York, NY: Basic Books
 Inc. [Record # 128 (p.146)]

- Cordoni, B. K. (1982). Post-secondary education: Where do we go from here? <u>Journal of Learning Disabilities</u>, <u>15</u>, 265-266. [Record # 82 (p.151)]
- Curtis, W. S., & Donlon, E. T. (1984). A ten-year follow-up study of deaf-blind children. Exceptional Children, 50, 449-455. [Record # 56 (p.153)]
- Edgar, E. (1987). Secondary programs in special education: Are many of them justifiable? Exceptional Children, 53(6), 555-561. [Record # 164 (p.157)]
- Elliot, R. E., Rock, D. A., & Kaplan, B. A. (1985).

 The psychometric characteristics of the SAT for 9
 handicapped groups, Report No 3. Princeton, NJ: College
 Entrance Examination Board (CEEB), Educational Testing
 Service (ETS), & Graduate Record Examination (GRE).

 [Record # 103 (p.159)]
- Frauenheim, J. G. (1978). Academic achievement characteristics of adult males who were diagnosed as dyslexic in childhood. <u>Journal of Learning Disabilities</u>, <u>11</u>, 476-483. [Record # 38 (p.166)]
- Gottesman, R. L. (1979). Follow-up of learning disabled children. <u>Learning Disability Ouarterly</u>, 2(1), 60-69. [Record # 32 (p.171)]
- Gregory, J. F., Shanahan, T., & Walberg, H. J. (in press). A descriptive analysis of high school seniors with speech disabilities, <u>Journal of Communication Disorders</u>. [Record # 66 (p.173)]
- Gregory, J. F., Shanahan, T., & Walberg, H. (1986).
 A profile of learning disabled twelfth graders in regular classes. <u>Learning Disability Quarterly</u>, 9(1), 33-42. [Record # 54 (p.174)]
- Gregory, J. F., Shanahan, T., & Walberg, H. (1985).
 What were they like in high school? Profile of speech disabled sophomores from a 1980 national study. American Rehabilitation, 11, 9-15, 32. [Record # 68 (p.175)]
- Gregory, J. F., Shanahan, T., & Walberg, H. J. (1985). A national survey of mainstreamed hearing impaired high school sophomores. <u>Journal of Rehabilitation</u>, <u>51</u>, 55-58. [Record # 64 (p.175)]
- Gregory, J. F., Shanahan, T., & Walberg, H. J. (1984).
 Mainstreamed hearing-impaired high school seniors:
 A re-analysis of a national survey. American Annals
 of the Deaf, 129, 11-17. [Record # 67 (p.176)]



- Gregory, J. F., Shanahan, T., & Walberg, H. J. (1980). Learning Disabled 10th graders in mainstreamed settings: a descriptive analysis. <u>Remedial Special Education</u>, <u>6</u>, 25-33. [Record # 65 (p.178)]
- Gross, S. (1984). Follow-up evaluation of Mark Twain students: Phase III. Rockville, MD: Montgomery County Public Schools, Dept. of Educational Accountability. (ERIC Document Reproduction Service No. ED 256 801) [Record # 77 (p.180)]
- Hall, P. K., & Tomblin, J. B. (1978). A follow-up study of children with articulation and language disorders.

 <u>Journal of Speech and Hearing Disorders</u>, 43, 227-241.

 [Record # 49 (p.181)]
- Hiebert, B., Wong, B., & Hunter, M. (1982). Affective
 influences on learning disabled adolescents. Learning
 Disability Quarterly, 5, (4), 334-343. [Record # (p.188)]
- Hippolitys, P. (1985). College freshmen with disabilities:

 preparing youth for employment. Washington, DC: Committee
 on Youth Development of the President's Committee
 on Employment of the Handicapped and The Higher Education
 and the Handicapped Resource Center of the American
 Council on Education. [Record # 118 (p.191)]
- Horn, W. F., O'Donnell, J. P., & Vitulano, L. A. (1983). Long-term follow-up studies of learning-disabled persons. <u>Journal of Learning Disabilities</u>, 16, 542-555. [Record # 50 (p.192)]
- Keilitz, I., Zaremba, B. A., & Broder, P. K. (1979).
 The link between learning disabilities and juvenile
 delinquency: Some issues and answers. <u>Learning Disability</u>
 Quarterly, 2, 2-11. [Record # 121 (p.195)]
- Kim, Y., & Wright, C. E. (1984). A longitudinal study of vocational education students from California secondary schools. Project SEE. Sacramento, CA: California State Dept. of Education. (ERIC Document Reproduction Service No. ED 251 672). [Record # 73 (p.200)]
- King, R. R., Jones, C., & Laskey, E. (1982). In retrospect: A fifteen-year follow-up report of speech-language disorderd children. <u>Language</u>, <u>Speech and Hearing</u> <u>Services in Schools</u>, <u>13</u>, 24-32. [Record # (p.201)]
- Kohring, C., & Tracht, V. S. (1978). A new approach to a vocational program for severely handicapped high school students. Rehabilitation Literature, 39(5), 138-146. [Record # 155 (p.204)]



- Leone, P. (1984). A descriptive follow-up of behaviorally disordered adolescents. <u>Behavioral Disorders</u>, 9, 207-214. [Recor. # 20 (p.209)]
- Levin, E. K., Zigmond, N., & Birch, J. W. (1985).
 A follow-up study of 52 learning disabled adolescents.

 <u>Journal of Learning Disabilities</u>, 13, 2-7.

 [Record # 37 (p.211)]
- Livingston-White, D. J. H. (1983). 1981 Follow-up study of students enrolled and previously enrolled in the Michigan School for the Blind and Michigan School for the Deaf. Lansing, MI: Michigan State Dept. of Education, Lansing. Div. of Special Education (ERIC Document Reproduction Service No. ED 230-012) [Record # 119 (p.214)]
- McDonnell, J., & Hardman, M. (1985). Planning the transition of severely handicapped youth from school to adult services: A framework for high school programs. Education and Training of the Mentally Retarded, 20, 277-287. [Record # 157 (p.222)]
- Messerer, J., & Meyers, G. (1983). The adequacy of high school preparation on the adult adjustment of learning disabled youth. Northeastern Illinois University. (ERIC Document Reproduction Service ED No. 248 681) [Record # 123 (p.224)]
- Mithaug, D. E., & Horiuchi, C. N. (1983). Colorado Statewide follow-up survey of special education students and appendices. Denver, CO: Colorado State Dept. of Education. (ERIC Document Reproduction Service No. ED 250 902). [Record # 11 (p.225)]
- Monohan, L. H., Giddan, N. S., & Emener, W. C. (1978).

 Blind students: Transition from high school to college.

 <u>Visual Impairment and Blindness</u>, 72, 85-87.

 [Record # 55 (p.228)]
- Norman, C. A., & Zigmond, N. (1980). Characteristics of children labeled and served as learnig disabled in school systems affiliated with child service demonstration centers. <u>Journal of Learning Disabilities</u>, 13, 16-21. [Record # 81 (p.229)]
- Norton, R. E., & Belcher, J. O. (1984). A guide to linkages between vocational education and organized labor in the United States. Columbus, OH: The National Center for Research in Vocational Education. Ohio State University. [Record # 151 (p.230)]



- Pflaster, G. (1981). A second analysis of factors related to the academic performance of hearing impaired children in the mainstream. The Volta Review, 83(2), 71-80. [Record # 161 (p.235)]
- Phelps, A. L. (Ed.). (1986). <u>School-to-work transition</u>
 <u>for handicapped youth: Perspectives on education and</u>
 <u>training</u>. Champaign, IL: Office of Career Development
 for Special Populations, College of Education, University
 of Illinois at Urbana-Champaign. [Record # 112 (p.236)]
- Piuma, C. (1980). <u>Developing a vocational education</u>
 <u>training program for severely handicapped adolescents</u>
 <u>and young adults: A feasibility study</u>. Berkeley, CA:
 Far West Lab. for Educational Research & Development,
 [Record # 158 (p.238)]
- Plisko, V. W., & Stern, J. D. (Eds). (1985). Educating handicapped students. In, <u>The Condition of Education</u>, 1985 Edition, (pp. 177-199). Washington, DC: National Center for Education Statistics, U.S. Dept. of Education. [Record # 153 (p.239)]
- Polloway, E. S., Epstein, M. H., Patton, J. R., Cullinan, D., & Luebke, J. (1986). Demographic, social, and behavioral characteristics of students with educable mental retardation. Education and Training of the Mentally Retarded, 21(1), 27-34. [Record # 105 (p.240)]
- Ragosta, M., & Kaplan, B. A. (1986). A survey of handicapped students taking special test administrations of the SAT and GRE, Report Number 5. Princeton, NJ: College Entrance Examination Board, Educational Testing Service and Graduate Record Exams Board. [Record # 107 (p.243)]
- Seidenberg, P. L., & Koenigsberg, E. (1986). A comparison of the perceptions of high school and college faculties' implications for program development for secondary learning disabled students. Long Island University Transition Project, Long Island, NY. [Record # 152 (p.259)]
- Sitlington, P. L. (1986). <u>Transition, special needs,</u>
 and vocational education. ERIC Clearinghouse on Adult,
 Career, and Vocational Education. Columbus, OH. [Record #
 159 (p.262)]
- Stodden, R., Meehan, K., Hodell, S., Rissoner, S., & Cabege, S. (1986). <u>Vocational assessment research</u> project: A report of findings for project year 1985-86, status study results. Manoa, HI: Department of Special Education, University of Hawaii. [Record # 113 (p.264)]



:. ⁹, 311

- Trachtman, R. (1986). <u>School/Business Collaborations:</u>

 <u>Their Impact on Teachers</u>. San Fransisco, CA: American

 Educational Research Association. [Record # 154 (p.271)]
- Trybus, R. J., & Karchmer, M. A. (1977). School achievement scores of hearing impaired children: National data on achievement status and growth patterns. American Annals of the Deaf Directory of Programs and Services, 122, 62-69. [Record # 89 (p.273)]
- Uno, T. & Petty, C. (1979). A survey of 1971-1977: Graduates of the model secondary school for the deaf. Washington, DC: Department of Health, Education, & Welfare, (ERIC Document Reproduction Service No. ED 203-620) [Record # 122 (p.274)]
- Vetter-Zemitzsch, A. A. (1983). A comparison of the characteristics of learning disabled and non-learning disabled young adults. <u>Dissertation Abstracts International 3359A-3360A</u>. (University Microfilms No. 8403627) [Record # 114 (p.276)]
- Wolk, S., & Illen, T. E. (1984). A 5-year follow-up of reading-comprehension achievement of hearing-impaired students in special education programs. Journal of Special Education, 18, 161-176. [Record # 36 (p.291)]
- Wright, P., & Santa Cruz, R. (1983). Ethnic compositions of special education programs in California. <u>Learning Disability Ouarterly</u>, <u>6</u>(4), 387-394. [Record # 143 (p. 292)]
- Zigmond, N., Thornton, H., & Kohnke, R. L. (1986).

 <u>Predictors of high school dropout in urban LD and NLD youth</u>. San Francisco, CA: American Education Rehabilitation Annual Conference. [Record # 96 (p.293)]



Appendix C

References for Employment Outcomes

- Alper, S. (1985). Comparing employer and teacher identified entry-level, job requisites of service occupations.

 <u>Education and Training of the Mentally Retarded</u>, 20(1), 89-96. [Record # 163 (p.120)]
- Asch, A. (1984). The experience of disability. American Psychologist, 39, 529-536. [Record # 21 (p.121)]
- Barker, T. L., et al. (1986). <u>Summary of the national consensus seminar on supported employment goals and performance measures</u>. Berkeley Planning Associates, San Fransisco, CA. [Record # 160 (p.122)]
- Bolton, B., Rowland, P., Brookings, J., Cook, D.,
 Taperek, P., & Short, H. (1980). Twelve years later:
 The vocational and psychological adjustment of former
 rehabilitation clients. <u>Journal of Applied Rehabilitation</u>
 <u>Counseling</u>, <u>11</u>, 113-123. [Record # 29 (p.128)]
- Bowe, F. (1983). <u>Demography and disability: A chartbook</u>
 <u>for rehabilitation</u>. Hot Springs, AR: Arkansas
 Rehabilitation and Training Center. (ERIC Document
 Reproduction Service No. ED 037-373) [Record # 117 (p. 130)]
- Bowe, F. (1984). <u>U.S. census and disabled adults:</u>

 The 50 status and the <u>District of Columbia</u>. Hot Springs,

 AR: Arkansas Rehabilitation and Training Center, (ERIC Document Reproduction Service No. ED 248-403)

 [Record # 139 (p.131)]
- Bowe, F., & Little, N. (1984). Computer accessibility:
 A study. Rehabilitation Literaure, 49(9-10), 289-291.
 [Record # 149 (p.132)]
- Brickey, M., Browning L., & Campbell, K. (1982).

 Vocational histories of sheltered workshop employees
 placed in projects with industry and competitive jobs.

 Mental Retardation, 20(2), 52-57. [Record # 91 (p.134)]
- Brickey, M. P., Campbell, K. M., & Browning, L. J. (1985). A five-year follow-up of sheltered workshop employees placed in competitive jobs. Mental Retardation, 23, 67-73. [Record # 60 (p.135)
- Brolin, D., Durand, R., Kromer, K., & Muller, P. (1975). Post-school adjustment of educable retarded students. Education and Training of the Mentally Retarded, 100, 144-49. [Record # 63 (p.136)]



- Brolin, D. E., & Kolstoe, O. P. (1978). The career and vocational development of handicapped learners, (Information series no. 135). Columbus, OH: The National Center for Research in Vocational Education. (ERIC Document Reproduction Service No. ED 166-419) [Record # 125 (p.138)]
- Clemmons, D. C., & Dodrill, C. B. (1983). Vocational outcomes of high school students with epilepsy. <u>Journal of Applied Rehabilitation Counseling</u>, <u>14</u>, 49-53. [Record # 44 (p.142)]
- Cloninger, L. (1976). <u>Our work study product: Does</u>
 <u>it stand up?</u> Paper presented at the Annual International
 Convention for the Council on Exceptional Children,
 Chicago, IL. [Record # 26 (p.143)]
- Collister, L. (1975). A comparison of the long range benefits of graduation from special vs mainstream school for mildly mentally handicapped students. Seattle, WA: Seattle Public Schools, Department of Planning, Research and Evaluation. (ERIC Document Reproduction Service No. ED 117 870) [Record # 2 (p.147)]
- Cock, J.J. (1976). Follow-up study of the visually impaired, 1976. Washington, DC: Bureau of Education for the Handicapped. (ERIC Document Reproduction Service No. ED 176 489) [Record # 25 (p.148)]
- Cook, J., Rovssel, A., & Skiba, P. (1987). <u>Transition</u>
 <u>into employment: Correlates of vocational achievement</u>
 <u>among severely mentally ill youth</u>. Chicago, IL:
 Thresholds. [Record # 167 (p.149)]
- Coonley, P. (1980). A fifteen year follow-up study of the North Kansas City Public Schools work study graduates 1966-1980. Paper presented at the annual international convention of the Council for Exceptional Children, Philadelphia, PA. [Record # 10 (p.150)]
- Dalton, R.F., & Latz, A. (1978). Vocational placement: The Pennsylvania Rehabilitation Center. Rehabilitation Literature, 39, 336-339. [Record # 48 (p.154)]
- Edgar, E., Levine, P., & Maddox, M. (1985). Washington State follow-up data of postsecondary special education students. Seattle, WA: University of Washington, Networking and Evaluation Team, Experimental Ed. Unit WJ-10. [Record # 23 (p.158)]



- Fafard, M., & Haubrich, P. A. (1981). Vocational and social adjustment of learning disabled young adults: A follow-up study. Learning Disability Quarterly, 4, 122-130. [Record # 40 (p.160)]
- Fardig, D. B., Algozzine R. F., Schwartz, S. E., Hensel, J. W., & Westling, D. L. (1985). Postsecondary vocational adjustment of rural mildly handicapped students. <u>Exceptional Children</u>, <u>52</u>, 115-121. [Record # 3 (p.161)]
- Fisher, A. T., & Harnisch, D. L. (1987). <u>Career aspiration models of adolescents and young adults: A comparison of handicapped and nonhandicapped students</u>. Paper presented at AERA Annual Conference. Washington, DC. [Record # 140 (p.163)]
- Ford, L., Dineen, J., & Hall, J. (1984). Is there life after placement? <u>Education and Training of the Mentally Retarded</u>, 19, 291-296. [Record # 39 (p.164)]
- Foss, G., & Perterson, S. L. (1981). Social-interpersonal skills relevant to job tenure for mentally retarded adults. Mental Retardation, 19(3), 103-106.
 [Record # 92 (p.165)]
- Gaylard-Ross, R. (1987). <u>Vocational integration for persons with mental handicaps: A cross-cultural perspective</u>. San Fransisco, CA: San Fransisco State University, Department of Special Education. CA. [Record # 147 (p.168)]
- Gill, H. (1984). An employment related follow-up of former special education students in Pierce County, Washington. Tacoma, WA: Vocational/Special Education Cooperative. (ERIC Document Reproduction Service No. ED 250 854) [Record # 4 (p.169)]
- Gollman, A. E., Simon, E. P., & Shinn, E. B. (1978). An outcome study of an intensive rehabilitation training program for young adults. <u>Visual Impairment and Blindness</u>, 72, 388-392. [Record # 79 (p.170)]
- Goyette, C. H., & Nardini, J. C. (1985). The learning disabled: A longitudinal study of the transition from school to work. Rehabilitation World, 9, 27-28. [Record # 57 (p.172)]
- Halpern, A. S. (1978). The impact of work/study programs on employment of the mentally retarded: Some findings from two sources. <u>International Journal of Rehabilitation Research</u>, 1, 167-175. [Record # 58 (p.182)]



- Hasazi, S. B., Gordon, L. R., Roe, C. A., Hull, M., Finck, K., & Salembier, G. (1985). A statewide follow-up on post high school employment and residential status of students labeled, "Mentally Retarded." Education and Training of the Mentally Retarded, 20, 222-234. [Record # 14 (p.184)]
- Hasazi, S. B., Gordon, L. R., & Roe., C. A. (1985).
 Factors associated with employment status of handicapped youth exiting high school from 1979-1983. Exceptional Children, 51, 455-469. [Record # 5 (p.185)]
- Hawkins, J. A. (1984). Follow-up study of special education graduates: Class of 1983. Rockville, MD: Dept. of Educational Accountability. (ERIC Document Reproduction Service No. ED 256 786) [Record # 72 (p.186)]
- Hill, J. W., Hill, M., Wehman, P., Banks, D. P., Pendleton, P., & Britt, C. (1985). Demographic analyses related to successful job retention for competitively employed persons who are mentally retarded. In P. Wehman & J. Hill (Eds.), Competitive employment for persons with mental retardation: From research to practice (pp.65-93). Richmond, VA: Virginia Commonwealth University. [Record # 24 (p.189)]
- Hill, M., Hill, J. W., Wehman, P., & Banks, P. D.

 (1985). An analysis of monetary and nonmonetary outcomes associated with competitive employment of mentally retarded persons. In P. Wehman & J. Hill (Eds.),

 Competitive employment for persons with mental retardation: From research to practice (pp.110-133).

 Richmond, VA: Virginia Commonwealth University.

 [Record # 27 (p.190)]
- Human Services Research Institute. (1985). <u>Summary</u>
 of data on handicapped children and youth. Washington,
 DC: U.S. Government Printing Office. [Record # 150 (p. 193)]
- Keith, K. D., Schalock, R. L., & Hoffman, K. (1986).
 <u>Quality of life: Measurement and programmatic implications</u>. Hastings, NE: Region III and V Mental Retardation Services. [Record # 11 (p.196)]
- Kerachsky S., Thorton, C., Bloomenthal, A., Maynard,
 R., & Stephens S. (1985). Impacts of transitional
 employment on mentally retarded young adults: Results of
 the STETS demonstration. Princeton, NJ: Mathematica Policy
 Research Inc. [Record # 110 (p.197)]



- Kiernan, W. E., & Bruininks, R. H. (1986). Demographic characteristics. In W. E. Kiernan, & J. A. Stark (Eds), <u>Pathways to employment for adults with development disabilities</u>, (pp. 21-50). Baltimore, MD: Paul H. Brookes. [Record # 102 (p.198)]
- Kiernan, W. E., McGaughey, M. S., & Schalock, R. L. (1986).
 National employment survey for adults with developmental disabilities. Boston, MA: The Developmental Evaluation Clinic. [Record # 148 (p.199)]
- Kirchner, C., & Peterson, R. (1979). Employment:
 Selected characteristics. Visual Impairment and Blindness,
 73, 239-242. [Record # 43 (p.202)]
- Kneipp, S. A., Vandergoot, D., & Lawrence, R. E. (1980).
 An evaluation of two job-search skills training programs in a vocational rehabilitation agency. <u>Rehabilitation</u>
 <u>Counseling Bulletin</u>, <u>23</u>, 202-208. [Record # 41 (p.203)]
- Korn, G. A. (1979). Prediction of vocational adjustment
 of handicapped youth from standard school data available
 in regional high schools. <u>Dissertation Abstracts</u>
 <u>International</u> 2592A-2593A. Boston University School of
 Education, (University Microfilms No. 79-23,877). [Record
 # 101 (p.205)]
- Lam, C. S. (1986). Comparison of sheltered and supported work programs: A pilot study. Rehabilitation Counseling Bulletin, 29, 66-82. [Record # 127 (p.207)]
- Little, R. E. (1979). Employment status and attitudes of former special education students. (University Microfilms International No. 80-04,062) [Record # 87 (p.213)]
- Magyar, C. W., Nystrom, J. B., & Johnson, N. (1977).

 A follow-up of former cerebral palsied students at
 a school for neuro-orthopedically disabled children.

 Rehabilitation Literature, 38, 40-42. [Record # 33 (p. 216)]
- Martin, J. E., & Agran M. (in press). Factors that impede the creative employment of mentally retarded workers: A review and analysis. In, S. E. Breuning & J. L. Matson (Eds.), Advances in Mental Retardation and Developmental Disabilities, (Volume III). New York, NY: JAI Press. [Record # 170 (p.217)]



- Mathews, R. M., & Fawcett, S. B. (1985). Assisting in the Job Search: A Behavioral Assessment and Training Strategy. <u>Journal of Rehabilitation</u>, <u>51(2)</u>, 31-36, [Record # 172 (p.218)]
- Mathews, R. M., Whang, P. L., & Fawcett, S. B. (1982).
 Behavioral assessment of occupational skills of learning disabled adolecents. <u>Journal of Learning Disabilities</u>, 15(1), 38-41. [Record # 173 (p.219)]
- Mathews, R. M., & Fawcett, S. B. (1984). Building the capacities of job candidates through behavioral instruction. <u>Journal of Community Psychology</u>, <u>12</u>, 123-129. [Record # 174 (p.220)]
- Mertens, D. M., & Seitz, P. (1982). <u>Labor market experiences</u> of handicapped youth. Columbus, OH: The Ohio State Univ., The National Center for Research in Vocational Education. [Record # 17 (p.223)]
- Mithaug, D. E., Horiuchi, C. N., & Fanning P. N. (1985). A report on the Colorado statewide follow-up survey of special education students. Exeptional Children, 51, 397-404. [Record # 6 (p.226)]
- Mitra, S. (1976). Rehabilitation research capacity building: Follow-up studies. Final Report, Monograph No. 2. Baltimore, MD: Copin State College, Department of Rehabilitation Counseling, (ERIC Document Reproduction Service ED No. 173-554) [Record # 144 (p.227)]
- Olshansky, S., & Beach, D. (1975). A five-year follow-up of physically disabled clients. Rehabilitation Literature, 36, 251-258. [Record # 34 (p.232)]
- O'Reilly, D. E. (1975). Care of the cerebral palsied: Outcome of the past and needs for the future. <u>Developmental Medicine and Child Neurology</u>, <u>17</u>, 3-7. [Record # 53 (p.231)]
- Passmore, D. L. (1982). Vocational and economic implications of deafness. <u>Journal of Epsilon Pi Tau</u>, <u>8</u>, 34-38. [Record # 52 (p.233)]
- Passmore, D. L., & Marron, M. (1980). Stating expected employment outcomes of occupational programs: A case study. University Park, PA: PA State University and National Technical Institute for the Deaf (NTID). (ERIC Document Reproduction Service No. ED 203 133) [Record # 76 (p.234)]



- Phelps, A. L. (1986). <u>Transitional programming for special needs youth</u>. Champaign, IL: Secondary Transition Intervention Effectiveness Institute, University of Illinois at Urbana-Champaign, Champaign, IL. [Record # 115 (p.236)]
- Quanty, M. (1977). <u>Initial job placement for JCCC</u>
 students, classes of 1973-1976. Overland Park, KS:
 Office of Institutional Research, Johnson County Community College (ERIC Document Reproduction Service No. ED 144-666). [Record # 120 (p.241)]
- Radar, B., Shapiro, H., & Rodin, E. A. (1978). On placement of multiply handicapped clients into the open job market. Rehabilitation Literature, 39, 299-302. [Record # 31 (p.242)]
- Redding, S. F. (1976). <u>Post-secondary school life adjustment of retarded and non-retarded low-functioning students</u>. (University Microfilms International No. 76-30,631) [Record # 88 (p.245)]
- Riccio, J. A., & Price, M. L. (1984). A transitional employment strategy for the mentally retarded: The final STETS implementation report. New York, NY: Manpower Demonstration Research Corporation. [Record # 109 (p.247)]
- Richardson, N., & Krieger, N. (1976). An evaluation of vocational placement success at a comprehensive rehabilitation center. Rehabilitation Literature, 37, 237-241. [Record # 42 (p.249)]
- Richardson, N. R., & Hill, J. (1980). An evaluation of vocational placement success at a comprehensive rehabilitation center: A third measurement.

 Rehabilitation Literature, 41, 19-22. [Record # 71 (p.248)]
- Roessler, R., & Bolton, B. (1985). Employment patterns of former vocational rehabilitation clients and implications for rehabilitation practice. Rehabilitation Counseling Bulletin, 28, 179-87. [Record # 70 (p.250)]
- Rosenberg, J. (1978). The relationship of types of post-high school education to occupation and economic independence of physically handicapped adults.

 Rehabilitation Literature, 38, 45-49. [Record # 30 (p. 251)]



- Ross, R. T., Begab, M. J., Dondis, E. H., Giampiccolo, J. S. Jr., & Meyers, C. E. (1985). <u>Lives of the Mentally Retarded: A Fourty-year Follow-up Study</u>. Stanford, CA: Stanford University Press. [Record # 18 (p.252)]
- Rusch, F. R. (1985). <u>Introduction to supported work</u>. Champaign, IL: Secondary Transition Intervention Effectiveness Institute. University of Illinois at Urbana-Champaign. [Record # 106 (p.253)]
- Scheerenberger, R. C., & Felsenthal, D. (1977). Community settings for MR persons: Satisfaction and activities. Mental Retardation, 15, 3-7. [Record # 46 (p.257)]
- Schwartz, S. E. (1980). Evaluation of the vocational preparation and success of handicapped individuals who reside in rural areas of Florida: A continuation report. Tallahassee, FL: Florida State Department of Education and Vocational Education, (ERIC Document Reproduction Service No. ED 195-671) [Record # 130 (p. 258)]
- Seltzer, M. M. (1984). Patterns of job satisfaction among mentally retarded adults. <u>Applied Research in Mental Retardation</u>, <u>5</u>, 147-159. [Record 138 (p.260)]
- Smith, M. (1986). <u>Supported employment for certain severely handicapped persons</u>. Education and Public Welfare Division, Congressional Research Service, The Library of Congress. Washington, DC. [Record # (p. 263)]
- Stodden, R. A., & Browder, P. M. (1986). Community based competitive employment preparation of developmentally disabled persons: A program description and evaluation. Education and Training of the Mentally Retarded, 21(1), 43-53. [Record # 126 (p.265)]
- Tarr, R. P., & Lewis, J. P. (1977). 1974-76 follow-up of the physically handicapped in Pennsyvania. Research Coordinating Unit for Voc. Ed. University Park, Pa: Pennsylvania Dept. of Education, (ERIC Document Reproduction Service No. ED 014-570) [record # 108 (p. 268)]
- Thomson, T. L., & Lucas, J. A. (1981). Follow-up study
 of former hearing impaired students at Harper College,
 1977-1980. Palatine, IL: Office of Planning and Research.
 (ERIC Document Reproduction Service No. ED 217 923)
 [Record # 75 (p.269)]



- Tindall, L. W., Gugerty, J. J., Dougherty, B. B., & Heffron, T. J. (1987). Replicating jobs in business and industry for persons with disabilities. Vol. 2. Madison, WI: Vocational Studies Center, University of Wisconsin. [Record # 146 (p.270)]
- Tracy, K. M. (1979). <u>Job skill training</u>, <u>placement</u>
 and follow-up of <u>rehabilitat_on clients in Utah sheltered</u>
 workshops. Salt Lake City, UT: Utah State Board for
 Vocational Education. (ERIC Document Reproduction
 Service No. ED 181-229) [Record # 126 (p.272)]
- Vandergoot, D. (1985). The transition from school to work of youth with disabilities. Unpublished manuscript, Human Resources Center New York, NY. [Record # 90 (p.275)]
- Vogel, H. D. (1975). A follow-up study of former student-patients at the Crippled Children's Hospital and School, Sioux Falls, South Dakota. Rehabilitation Literature, 36, 270-273. [Record # 35 (p.277)]
- Vogelsberg, T. R., Ashe, W., & Williams, W. (1984).
 Community based service delivery in rural Vermont:
 Issues and recommendations. In R. Horner, L. M. Voeltz,
 & B. Fredericks, (Eds.), Education of learners
 with severe handicaps, Exemplary Service Strategy,
 Baltimore MD: Paul Brookes. [Record # 171 (p.278)]
- Wacker, D. P., Kerr, N. J., & Carroll J. L. (1983).
 Discrimination skill as a predictor of prevocational performance of institutionalized mentally retarded clients. Rehabilitation Psychology, 28(1), 45-59.
 [Record # 100 (p.279)]
- Weatherman, R. F., Stevens L. J., & Krantz, G. C. (1986).

 <u>Current practice and models in transition programming in passages to careers: A framework for transition policy for mildly handicapped young adults.</u> St. Paul, MN: University of Minnesota, Dept. of Vocational and Technical Education and Dept. of Educational Psychology. [Record # 99 (p.280)]
- Wehman, P., Hill, M., Goodall, D., Cleveland, P., Brooke, V., & Pentecost, H. Jr. (1982). Job placement and follow-up of moderately and severely handicapped individuals after three years. The Journal of the Association for the Severely Handicapped, 10, 5-16. [Record # 7 (p.281)]



- Wehman, P., Hill, M., Hill, J., Brooke, V., Pendleton, P., & Britt, C. (1985). Competitive employment for persons with mental retardation: A follow-up six years later. Mental Retardation, 23, 274-281. [Record # 9 (p.282)]
- Wehman, P., Kregel, J., & Seyfarth, J. (1985). Employment outlook for young adults with mental retardation.

 <u>Rehabilitation Counseling Bulletin</u>, 29, 90-99.

 [Record # 22 (p.283)]
- Wehman, P., Kregel, J., and Seyfarth, J. (1985). Transition from school to work for individuals with severe handicaps: A follow-up study. The Journal of the Association for the Severely Handicapped, 10, 132-136. [Record # 8 (p. 284)]
- Whang, P. L., Fawcett, S. B., & Mathews, R. M. (1984).
 Teaching job related social skills to learning disabled adolescents. Analysis and Intervention in Developmental Disabilities, 4, 29-28. [Record # 175 (p.287)]
- White, W. J., Alley, G. R., Deshler, D. D., Schumaker, J. B., Warner, M. W., & Clark, F. L. (1982). Are there learning disabilities after high school? <u>Exceptional Children</u>, 49, 273-74. [Record # 61 (p.268)]
- Wilson, R. J., & Rasch, J. D. (1982). The relationship of job characteristics to successful placements for psychiatrically handicapped. <u>Journal of Applied Rehabilitation Counseling</u>, <u>13</u>, 30-33. [Record # 45 (p. 289)]
- Wolfe, B.L. (1979). <u>Impacts of disability and some</u>
 <u>policy implications</u>. Madison, WI. University of Wisconsin,
 Institute for Research on Poverty. (ERIC Document
 Reproduction Service No. ED 175 956) [Record # 78 (p.
 290)]
- Zollers, N., Conroy, J., Hess, C., & Newman, E. (1984).

 <u>Transition from school to work, a study of Young adults and their families in Pennsylvania</u>. Unpublished Manuscript, Temple University Philadelphia, PA.

 [Record # 16 (p.294)]

Appendix D

References for Independent Living Outcomes

- Agran, M., & Martin, J. E. (1987). Applying a technology of self-control in community environments for individuals who are mentally retarded. In M. Herser, R. M. Eipler, & P. M. Miller, (Eds.), <u>Progress in Behavior Modification</u> (pp.108-151). Beverly Hills, CA. [Record # 132 (p.119)]
- Bell, N. (1976). IQ as a factor in community lifestyle of previously institutionalized retardates. Mental Retardation, 14, 29-33. [Record # 62 (p.123)]
- Bikson, T. A., & Bikson, T. K. (1981). <u>Functional problems</u> of the visually impaired: A research approach. Santa Monica, CA: Rand Corp. [Record # 69 (p.127)]
- Bydde, J., Petty, R., & Nelson, C. (1984). Problems
 and benefits associated with consumer satisfaction
 evaluation at independent living centers. Lawrence, KS:
 The Research and Training Center on Independent Living,
 University of Kansas. [Record # 168 (p.141)]
- Clowers, M. R., & Belcher, S. A. (1979). A service delivery model for the severely disabled individual: Severity and closure criteria. Rehabilitation Counseling Bulliten. 23, 8-14. [Record # 47 (p.144)]
- DeJung, J. E., & Reed, D. M. (1978). Measurement of community adjustment of mildly retarded young adults: Final reports. Eugene, OR: University of Oregon, College of Education. ERIC Document Reproduction Service No. ED 126 221) [Record # 135 (p.155)]
- Faretra, G. (1981). A profile of aggression from adolescence to adulthood: An 18-year follow-up of psychiatrically disturbed and violent adolescents.

 <u>American Journal of Ortho-Psychiatry</u>, 51(3), 439-453.

 [Record # 80 (p.162)]
- Gaule, K., Nietupski, J., & Certo, N. (1985). Teaching supermarket shopping skills using an adaptive shopping list. Education and Training of the Mentally Retarded, 20, 53-59. [Record # 136 (p.167)]
- Hart, J. L., Moilanen, M. S., & Bensmad, A. S. (1983).

 Transitional rehabilitation: Another step toward community living. Rehabilitation Literature, 44 (5-6). 149-152.

 [Record # 165 (p.183)]



- Heal, L. W., & Chadsey-Rusch, J. (1985). The Lifestyle Satisfaction Scale (LSS): Assessing individual:s satisfaction with residence, community setting, and associated services. Applied Research in Mental Retardation, 6, 475-490. [Record # 134 (p.187)]
- Jones, M. L., Petty, C. R., Boles, C., & Mathews, R. M. (1985). <u>Independent living: A survey of program and service needs</u>. Lawrence, KS: The Research and Training Center on Independent Living. [Record # 166 (p. 194)]
- Kregel, J., Wehman, P., & Seyfarth, J. (1985). Community
 integration of young adults with mental retardation:
 Transition from school to adulthood. In Paul Wehman
 & Janet Hill (Eds.), Competitive Employment for Persons
 with Mental Retardation: From Research to Practice
 (pp. 230-246.). Richmond, VA: Virginia Commonwealth
 University. [Record # 28 (p.206)]
- Landesman-Dwyer, S. (1981). Living in the community.

 American Journal of Mental Deficiency, 86(3), 223-234.

 [Record # 94 (p.208)]
- Lessard, K. J. (1982). <u>Developing community housing</u>
 <u>services for the blind and deaf-blind students who</u>
 <u>have completed our training programs: What is our</u>
 <u>responsibility?</u> Vancouver, B.C.: Association for Education
 of the Visually Handicapped. (ERIC Reproducation
 Service No. ED 240 793) [Record # 74 (p.210)
- Libbey, S. S., & Pronovost, W. (1980). Communication practices of mainstreamed hearing-impaired adolescents. <u>Volta Review</u>, <u>82</u>(3), 179-213. [Record # 83 (p.212)
- Loughlin, B. J. (1981). Final project report of optimizing vocational development in the handicapped, September 1980 January 1981. Trenton, NJ: New Jersey State Department of Education (ERIC Document Reproduction Service No. ED 206 893) [Record # 124 (p.215)]
- McDevitt, S. C., Smith, P. M., Schmidt, D. W., & Rosen, M. (1978). The deinstitutionalized citizen: Adjustment and quality of life. Mental Retardation, 16, 22-24. [Record # 51 (p.221)]
- Reagan, M. W., Murphy, R. J., Hill, Y. F., & Thomas, D. R. (1980). Community placement stability of behavior problem educable mentally retarded students. Mental Retardation, 18(3), 139-142. [Record # 95 (p.244)]



- Reid, G. M. (1978). A comparative analysis of selected characteristics of mildly mentally retarded adolescents and their subsequent adult status. <u>Univeristy Microfilms International</u> (No 79-06,368). [Record # 176 (p.246)]
- Schalock, R., Harper, R. S., & Carver, G. (1981). Independent living placement: Five years later. American Journal of Mental Deficiency, 86(2), 170-177. [Record # 85 (p. 255)]
- Schalock, R. L. (1986). <u>Current approaches to assesing a person's quality of life</u>. Paper presented at the 110th meeting of the American Association on Mental Deficiency. Denver, Co. [Record # 131 (p.254)]
- Schalock, R. L., & Lilley, M. A. (1986). Placement from community-based mental retardation programs: How will do clients do after 8 to 10 years? American Journal of Mental Deficiency, 90(6), 669-676. [Record # 133 (p. 256)]
- Seltzer, M. M., Seltzer, G. B., & Sherwood, C. C. (1982). Comparison of community adjustment of older vs. younger mentally retarded adults. <u>American Journal of Mental Deficiency</u>, 87(1), 9-13. [Record # 84 (p.261)]
- Sútter, P., Mayeda, T., Yanagi, G., & Yee, S. (1980).
 Comparisons of successful and unsuccessful
 community placed mentally retarded persons. American
 Journal of Mental Deficiency, 85(3), 262-270.
 [Record # 86 (p.266)]
- Wehman, P., & Schleien, S. (1980). Assessment and selection of leisure skills for severely handicapped individuals. Education and Training of the Mentally Retarded, 15, 50-57. [Record # 137 (p.285)]
- Whang, P., Suarez D. B., & Fawcett, S. (1982). <u>Disabled</u>
 <u>citizens concerns report for Independence, Inc., consumer</u>
 <u>advisory committee</u>, (Monograph 13-A). The Research &
 Training Center on Indepent Living, University of
 Kansas, Lawrence, KS. [Record # 169 (p.286)]



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